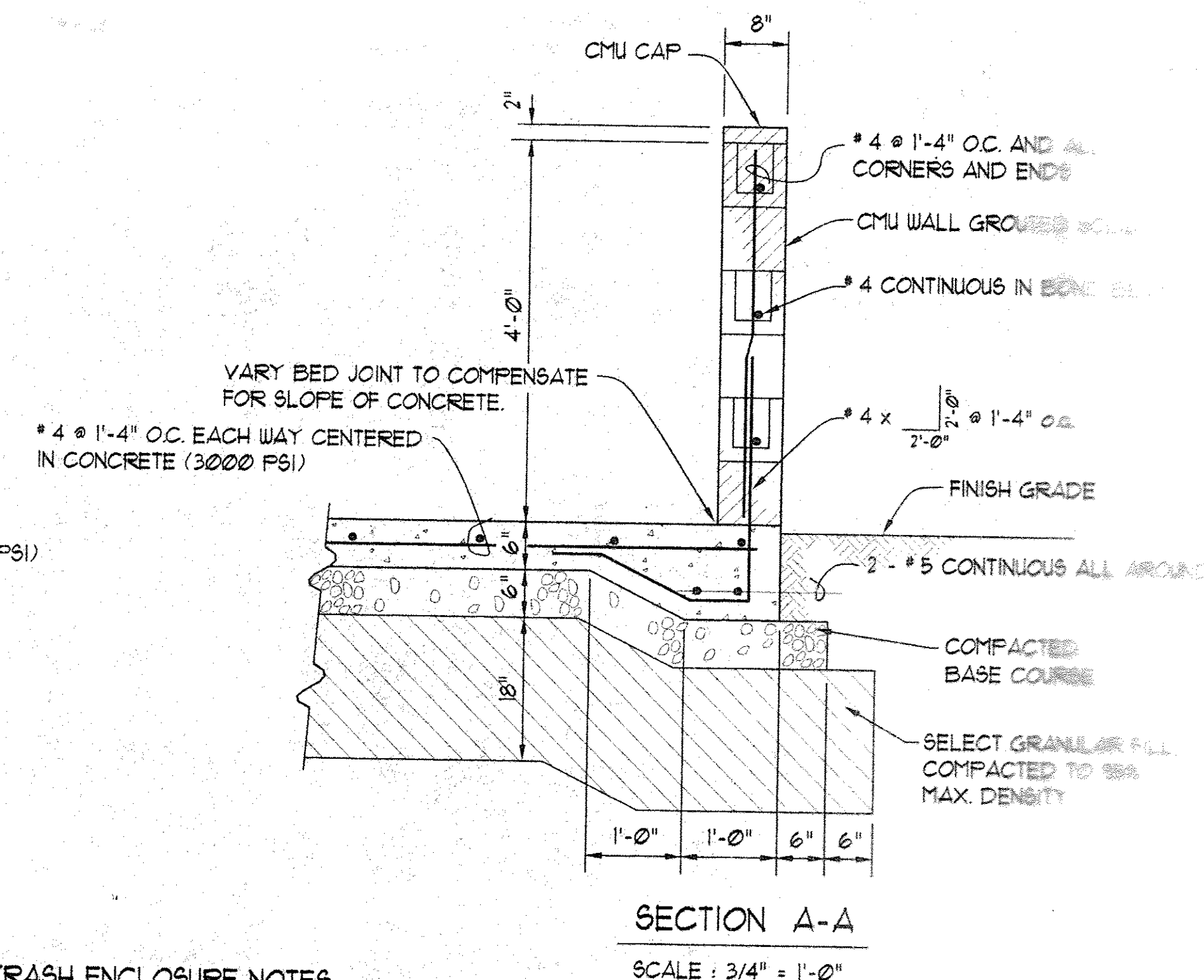
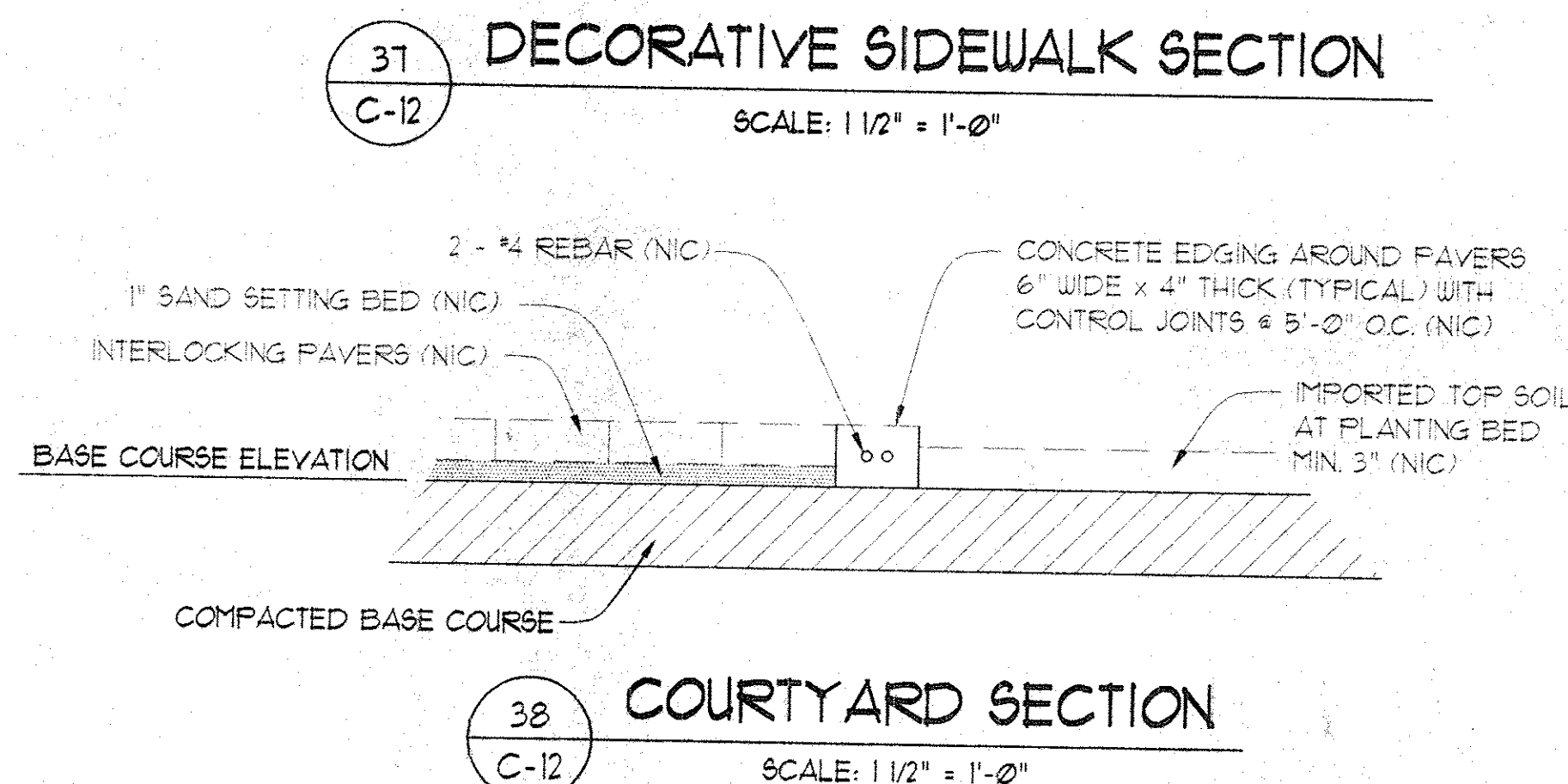
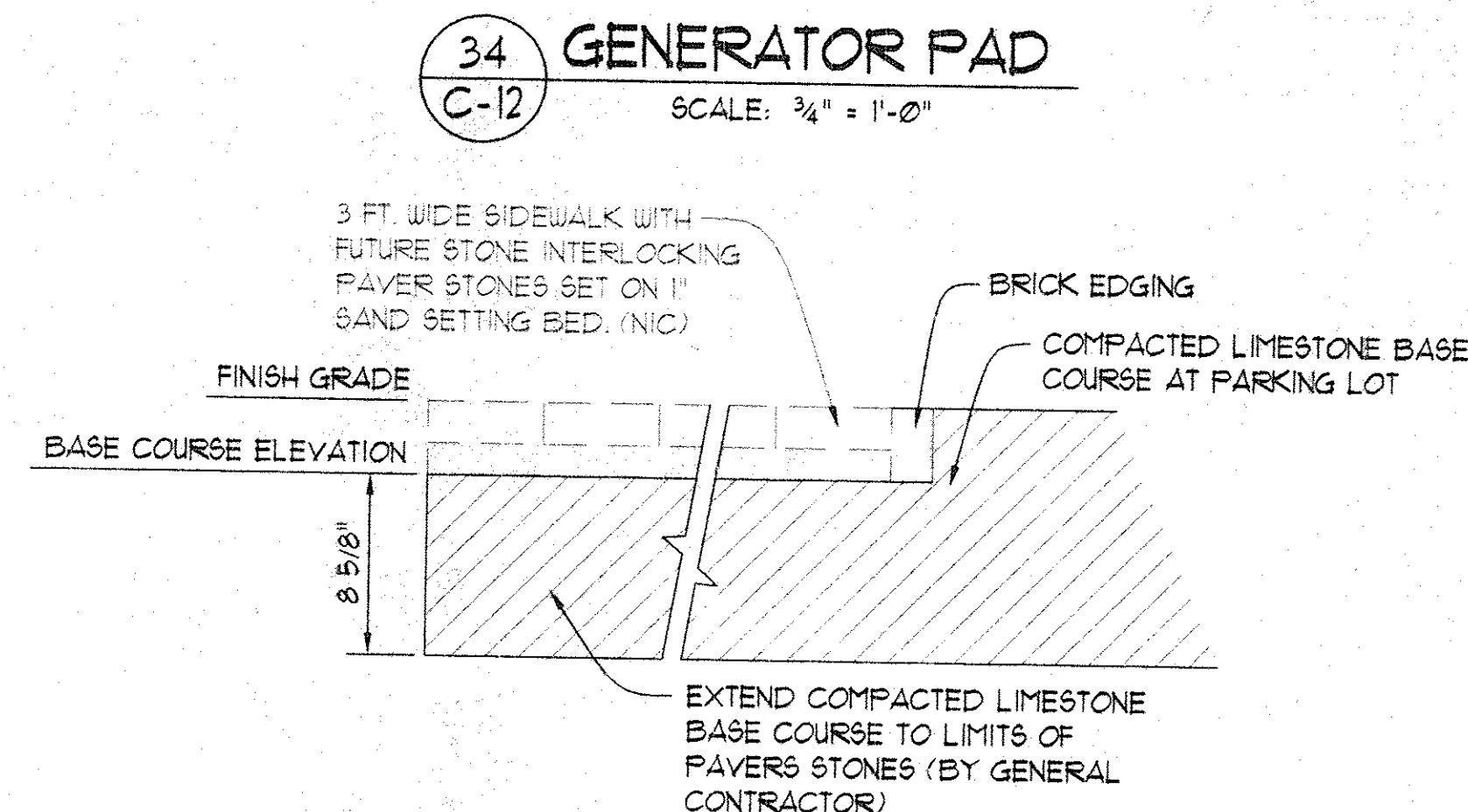
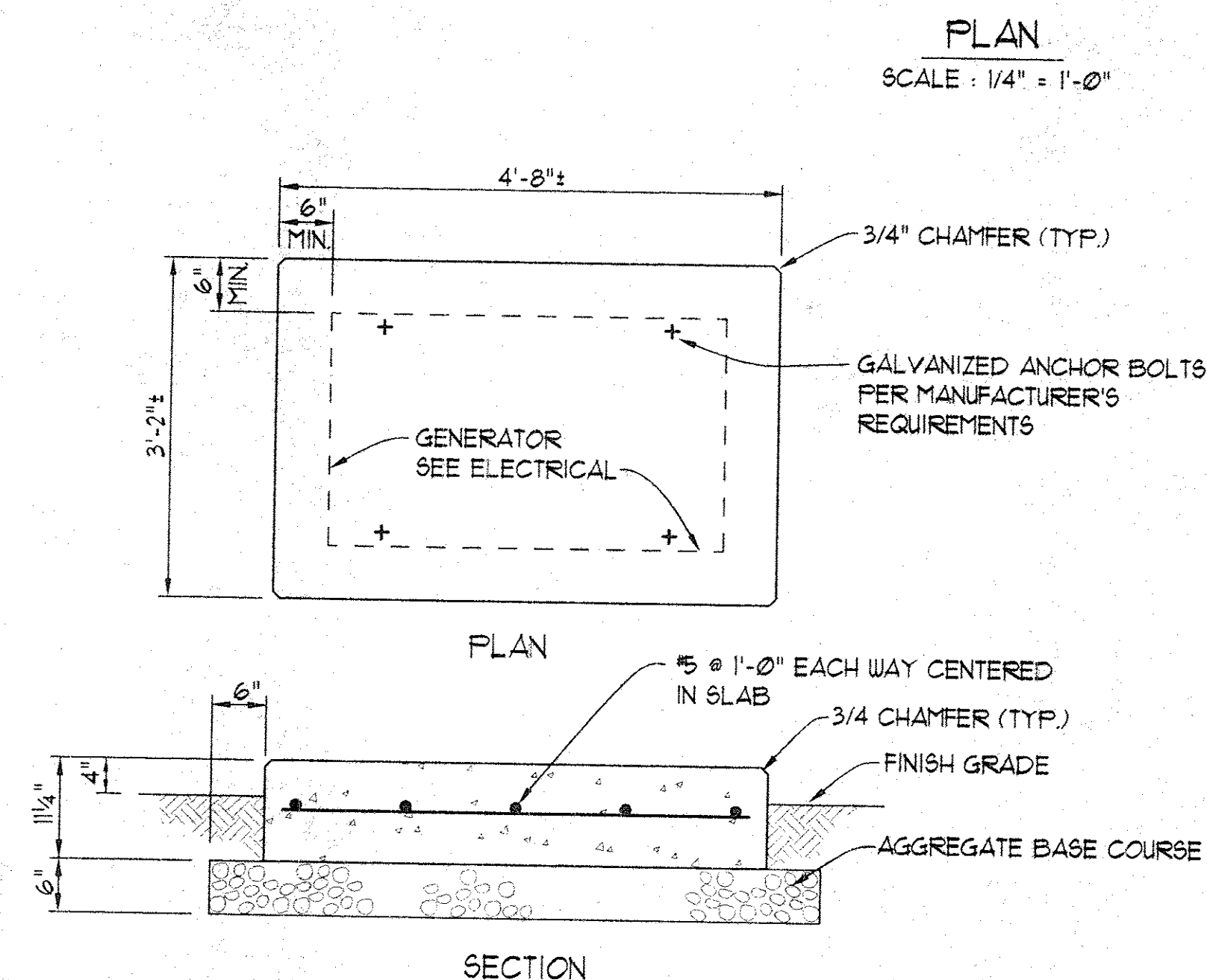
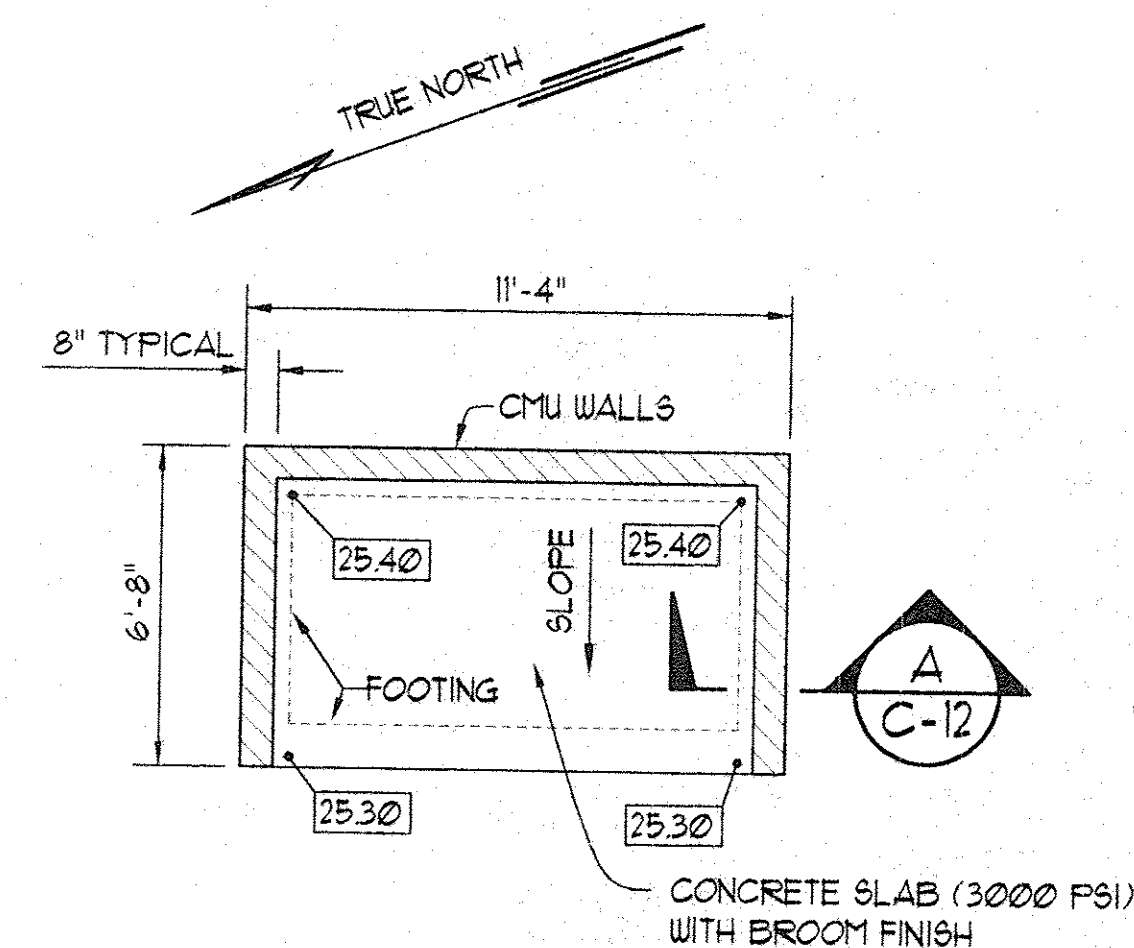
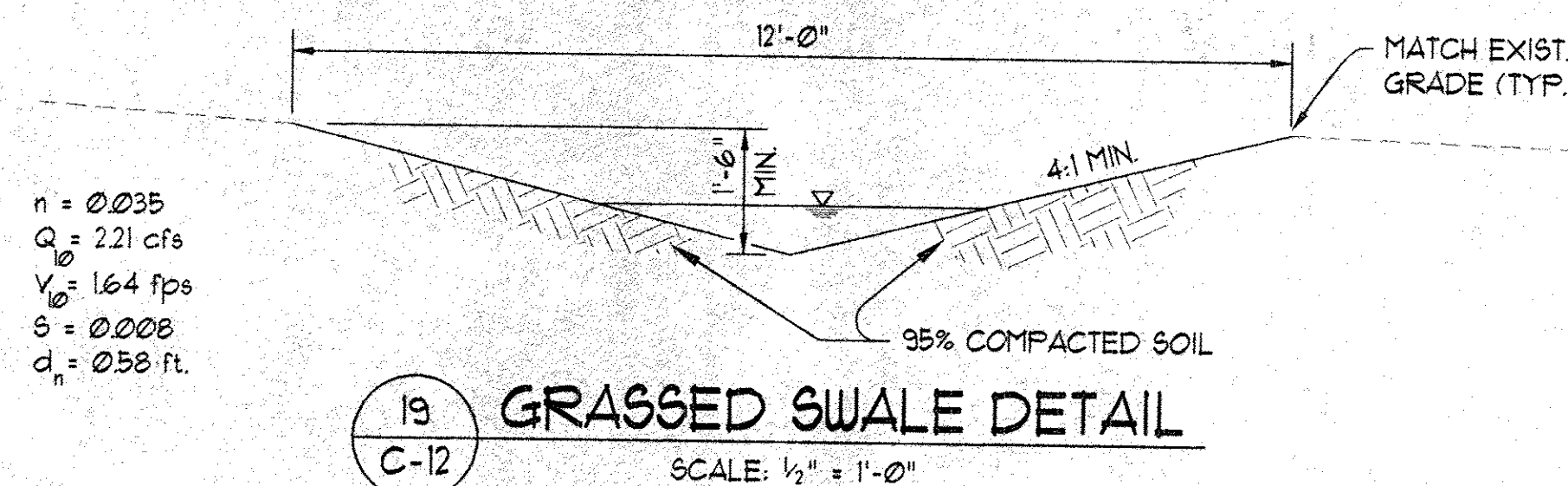
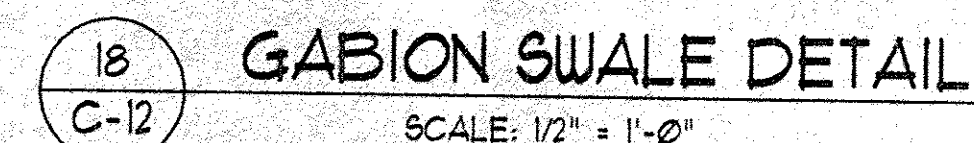
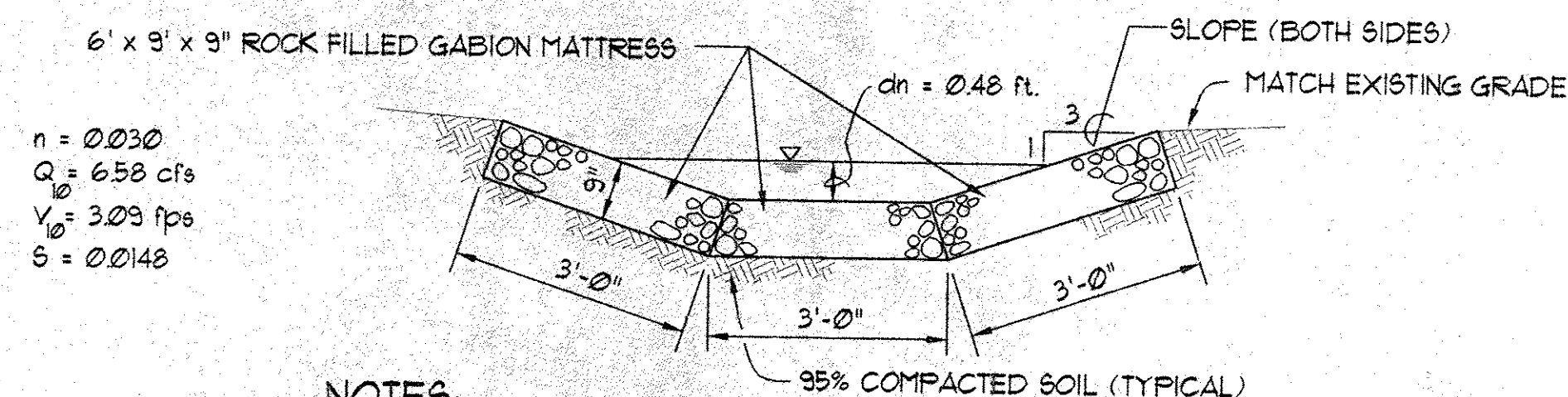
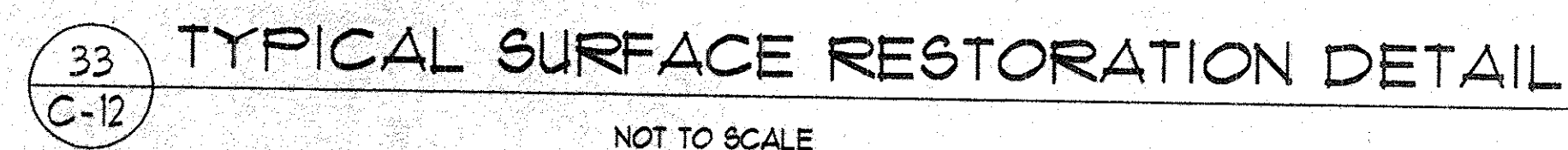


### A.C. PAVEMENT




TRASH ENCLOSURE NOTES

- A. DETAILS SHOWN ON DRAWINGS SHALL BE TYPICAL FOR ALL SIMILAR CONDITIONS. MODIFY DETAILS FOR SPECIAL CONDITIONS AS DIRECTED BY THE ENGINEER.
- B. ALL CMU UNITS SHALL BE ASTM C90, TYPE II, 2-CELL UNITS, UNLESS OTHERWISE SHOWN. PROVIDE CORNER END, BOND BEAM, AND OTHER SPECIAL UNITS AS REQUIRED. CONCRETE MASONRY UNITS SHALL BE LAID IN RUNNING BOND PATTERN.
- C. CARE SHALL BE EXERCISED TO MINIMIZE THE PENETRATION OF MORTAR INTO JOINT SPACES. ALL CELLS SHALL BE SOLIDLY FILLED WITH GROUT.
- D. ALL MORTAR SHALL CONFORM TO ASTM C270, TYPE S. GROUT SHALL BE MADE WITH STONE AGGREGATE AND SHALL DEVELOP 3000 PSI COMPRESSIVE STRENGTH IN 28 DAYS.
- E. ALL CONCRETE SHALL CONFORM TO ASTM C34, 3000 PSI.
- F. ALL REINFORCING BARS SHALL BE ASTM A615, GRADE 60.
- G. PROVIDE 1 - #4 VERTICAL AT ALL CORNERS. HORIZONTAL BAR LAPS AT CORNERS SHALL BE 32 BAR DIAMETERS.
- H. SPLICES SHALL BE 32 BAR DIAMETERS OR 2'-0" WHICHEVER IS GREATER, UNLESS OTHERWISE SHOWN.

REVISION NO.		DESCRIPTION		DATE	
				APPROVED BY:	



THIS WORK WAS PREPARED  
BY ME OR UNDER MY  
SUPERVISION AND CONSTRUCTION  
OF THIS PROJECT WILL BE  
UNDER MY OBSERVATION

*June J. Nakamura*  
26-97

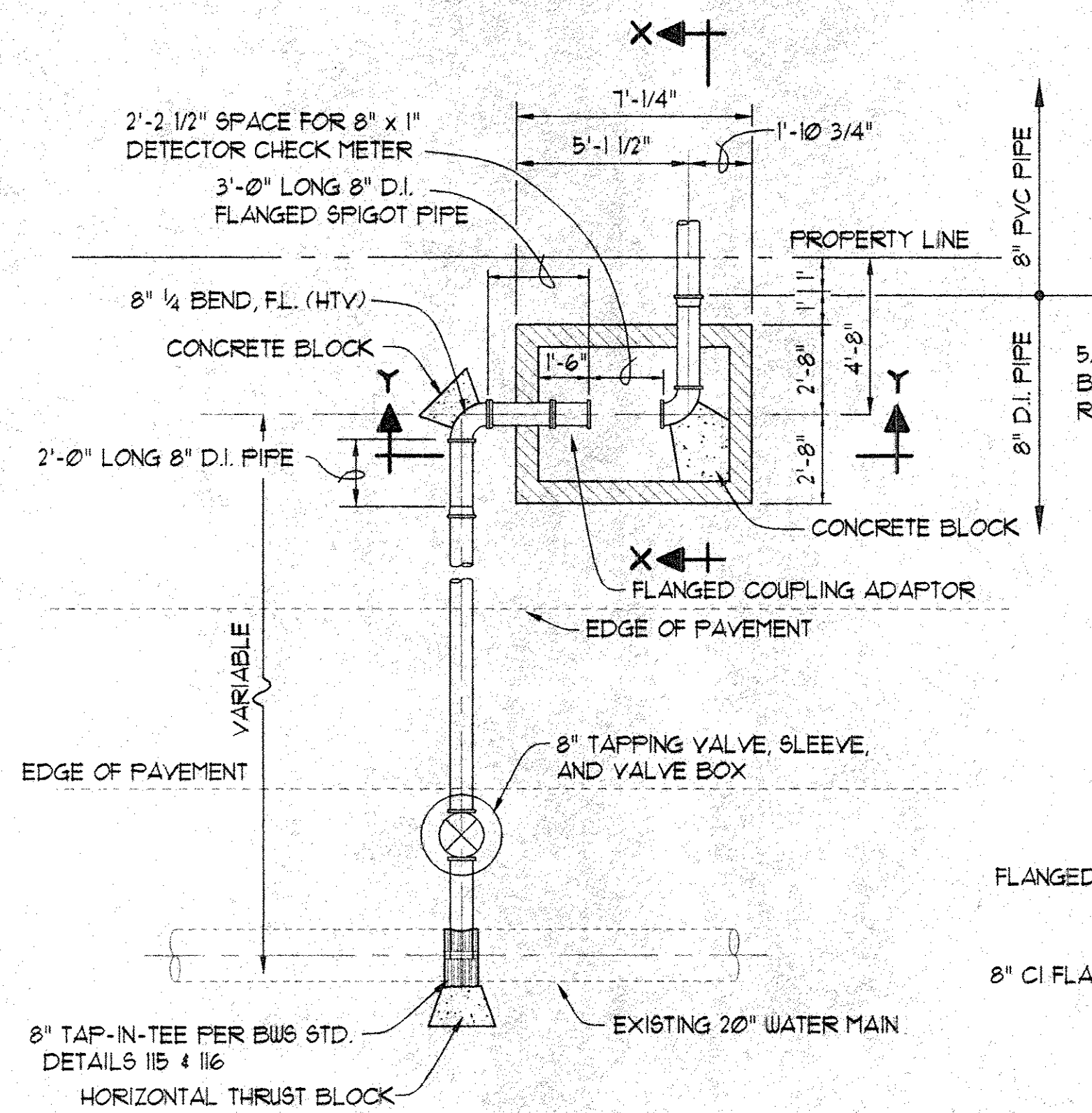
**ENGINEERING SOLUTIONS, INC.**  
*Consulting Engineers*  
 98-021 Kamehameha Highway • Suite 211 • Aiea • Hawaii 96701

**WAIMANALO TASTE PROJECT**  
 TAX MAP KEY # 4 - 01 - 09 : 01 LOT B

**MISCELLANEOUS DETAILS**

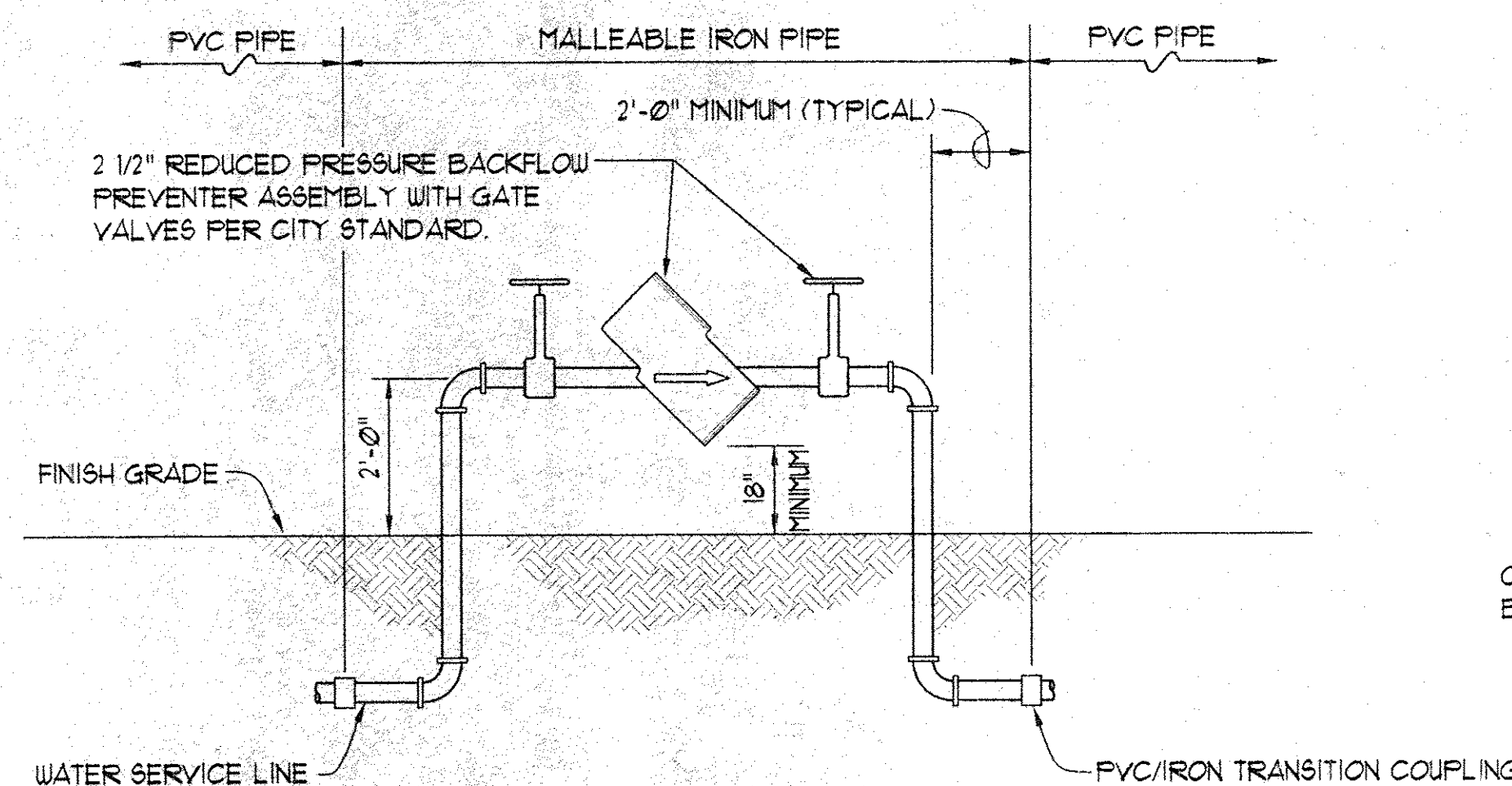
DESIGNED BY : REF	CHECKED BY : AJN	CS PROJ. NO. 0000
DRAWN BY : LSA/LUH	DATE: 01-21-97	SCALE: AS SHOWN





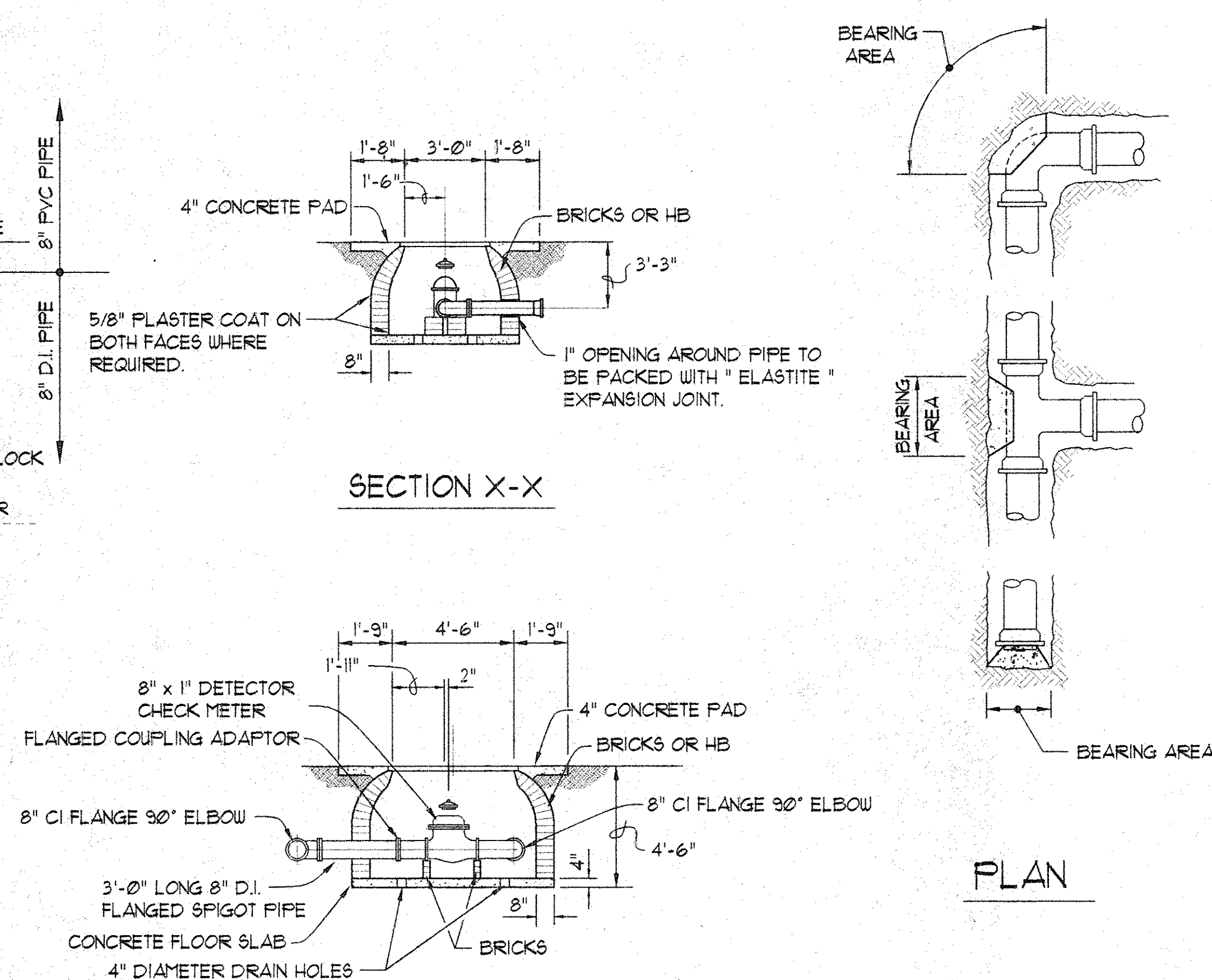
- NOTES :
1. MATERIALS FOR TESTING REQUIRED
  - 1 - SLEEVE
  - 1 - CAP WITH CLEANOUT
  - 8 - L.F. CONNECTION PIPE
  - 1 - CONCRETE BLOCK

20 DETECTOR CHECK METER DETAIL  
C-13 SCALE : 1/4" = 1'-0"

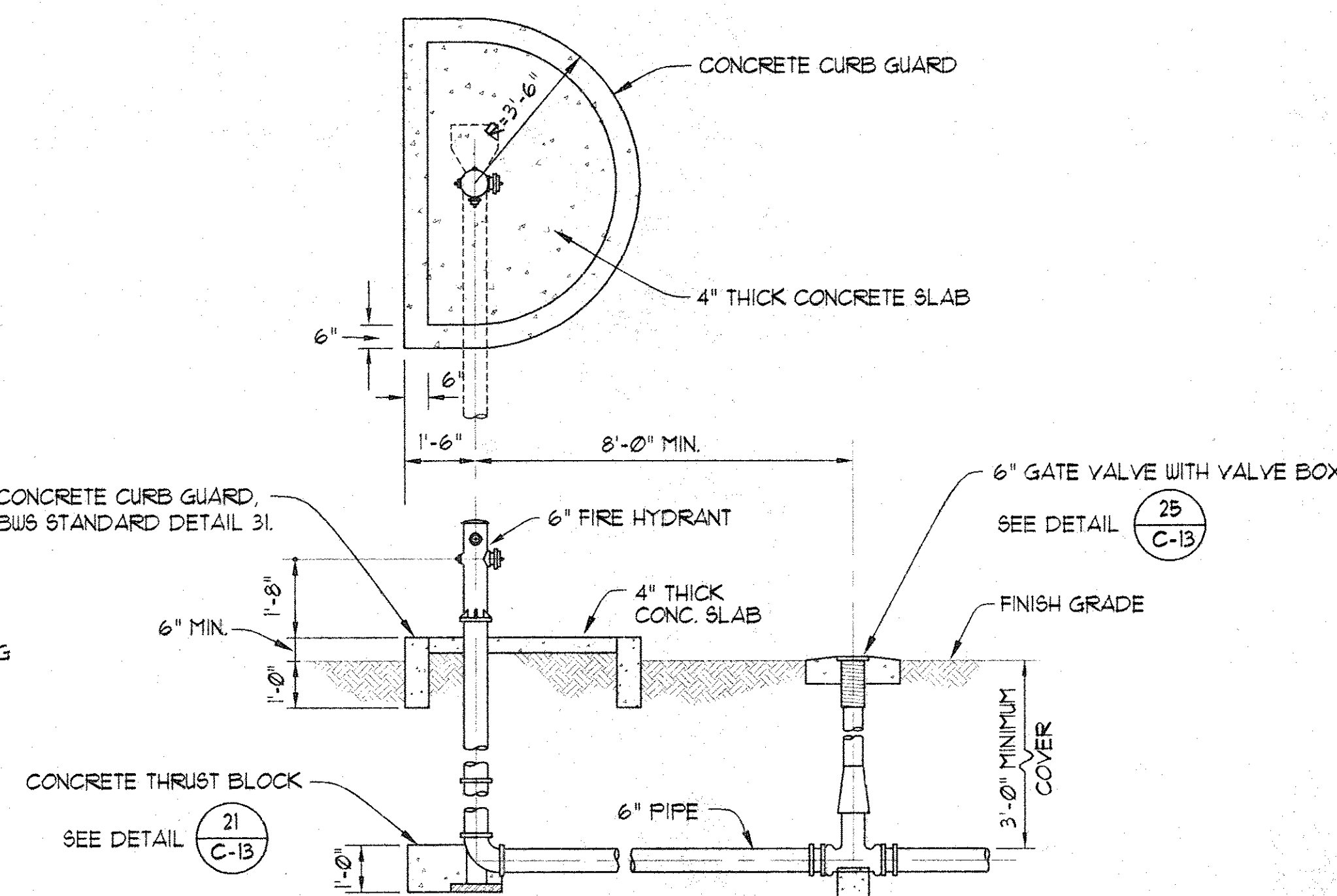


- NOTE :
1. REDUCED PRESSURE BACKFLOW PREVENTER PER BWS STANDARDS. SEE DRAWING FOR LOCATION.
  2. ALL BEARING SURFACES SHALL BE AGAINST UNDISTURBED GROUND TYPICAL.

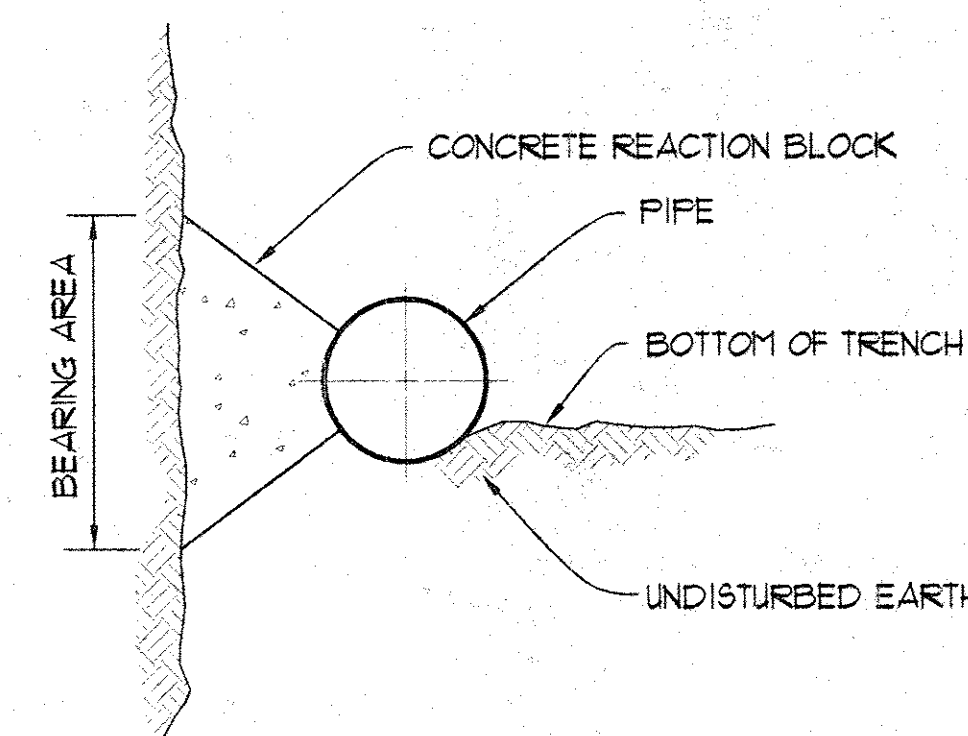
23 REDUCED PRESSURE BACKFLOW PREVENTER  
C-13 NOT TO SCALE



21 CONCRETE THRUST BLOCK DETAIL (PRIVATE)  
C-13 NOT TO SCALE



24 FIRE HYDRANT CONNECTION DETAIL  
C-13 SCALE: 3/8" = 1'-0"



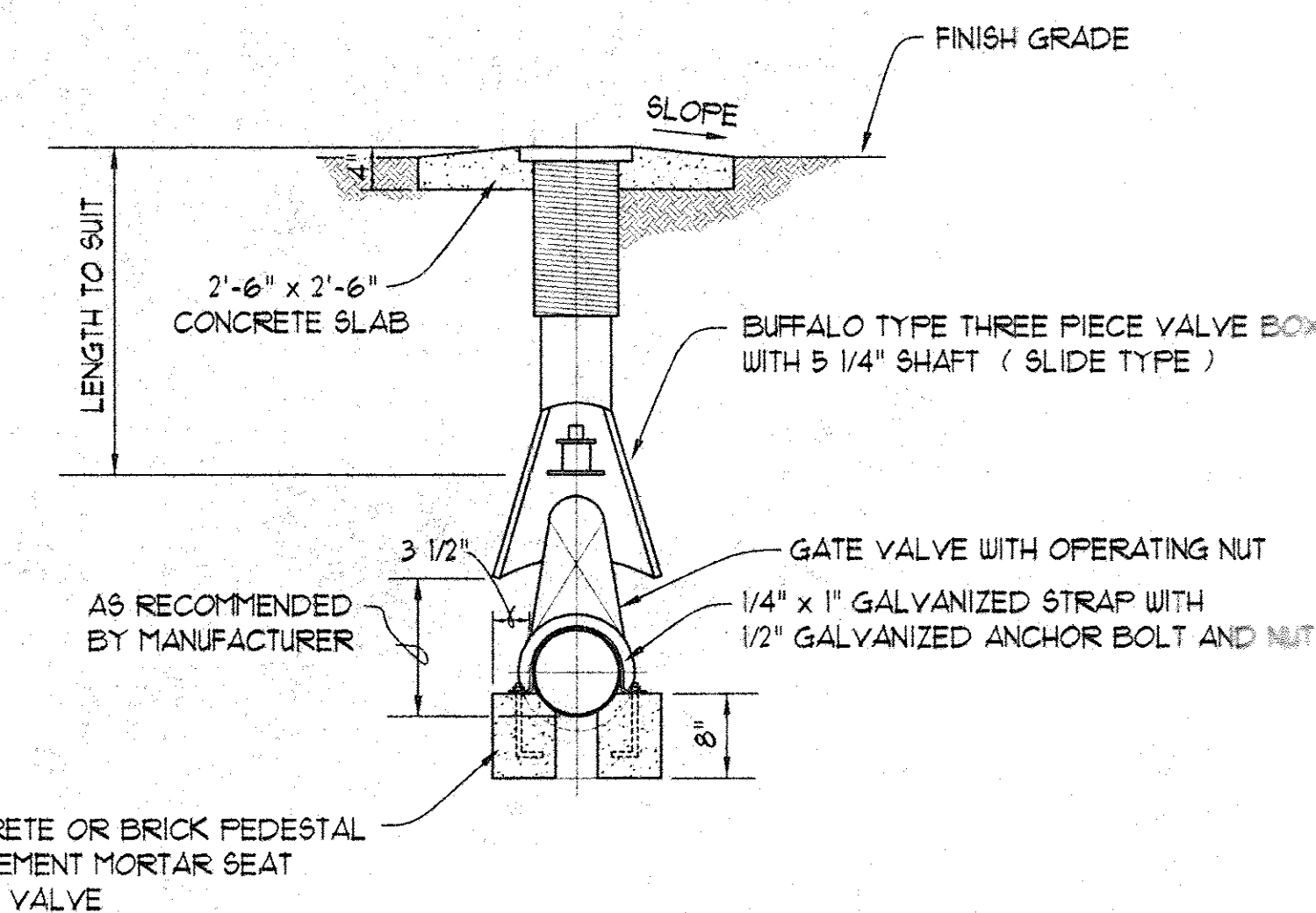
BEARING FACE AREA (SQ. FT)

PIPE SIZE	TEE/CAP	90° BEND	45° BEND	1125° BEND
6"	7.0	10.0	5.5	1.5
8"	12.5	18.0	9.5	2.5

- NOTES :
1. CONCRETE REACTION BLOCKS SHALL BE INSTALLED AT ALL TEES, PLUGS, WYES AND BENDS OVER 3". BEARING AREA SHALL BE APPROXIMATELY SQUARE.
  2. CONCRETE SHALL BE 2500 PSI AND SHALL BE POURED AGAINST UNDISTURBED EARTH.
  3. ALL CONCRETE REACTION AND THRUST BLOCKS ARE DESIGNED FOR A MAXIMUM OPERATING PRESSURE OF 250 PSI AND 1000 PSF SOIL BEARING LOADS.

- NOTES :
1. SEE WATER NOTES ON SHEET C-2

22 COMMON WATER LINE TRENCH DETAIL  
C-13 SCALE : 1" = 1'-0"



25 CAST IRON VALVE BOX DETAIL  
C-13 SCALE: 3/4" = 1'-0"

REVISION NO.	DESCRIPTION	DATE	APPROVED BY

JUNE J. NAKAMURA  
LICENSED PROFESSIONAL ENGINEER  
No. 4376-C  
HAWAII, U.S.A.

**ENGINEERING SOLUTIONS, INC.**  
Consulting Engineers  
98-021 Kamehameha Highway • Suite 211 • Aiea • Hawaii 96701

**WAIMANALO TEEN PROJECT**  
TAX MAP KEY : 4 - 01 - 09 : 01 LOT B

**WATER DETAILS**

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

DESIGNED BY : LKH    CHECKED BY : REF    ESD PROJ. NO. : 8058    DATE : 01-21-97    SCALE : AS SHOWN    **C-13**

DRAWN BY : LKH

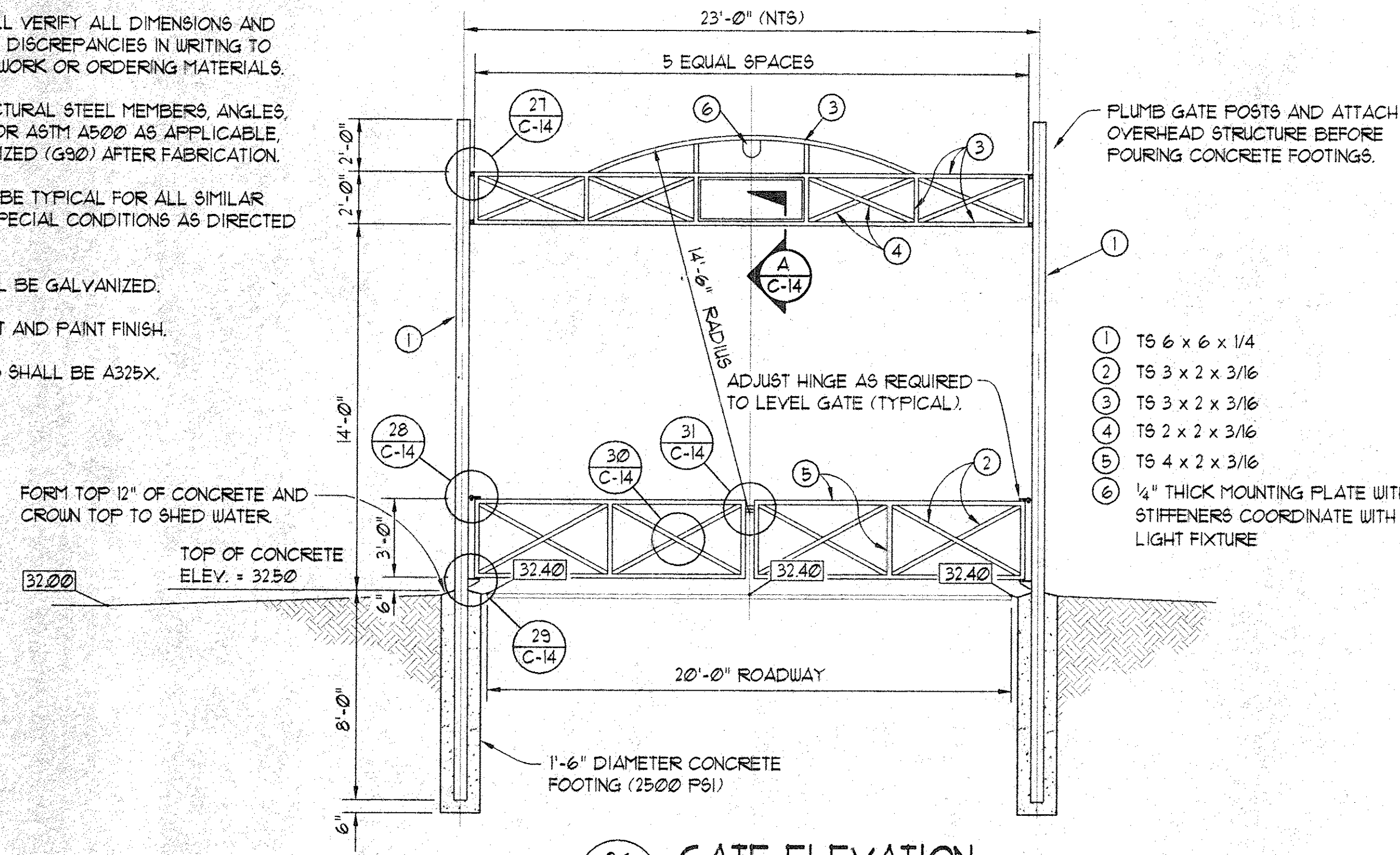
APPROVED BY:

CHIEF, PLANNING & ENGINEERING DIVISION, BWS  
(FOR METER INSTALLATION ONLY)

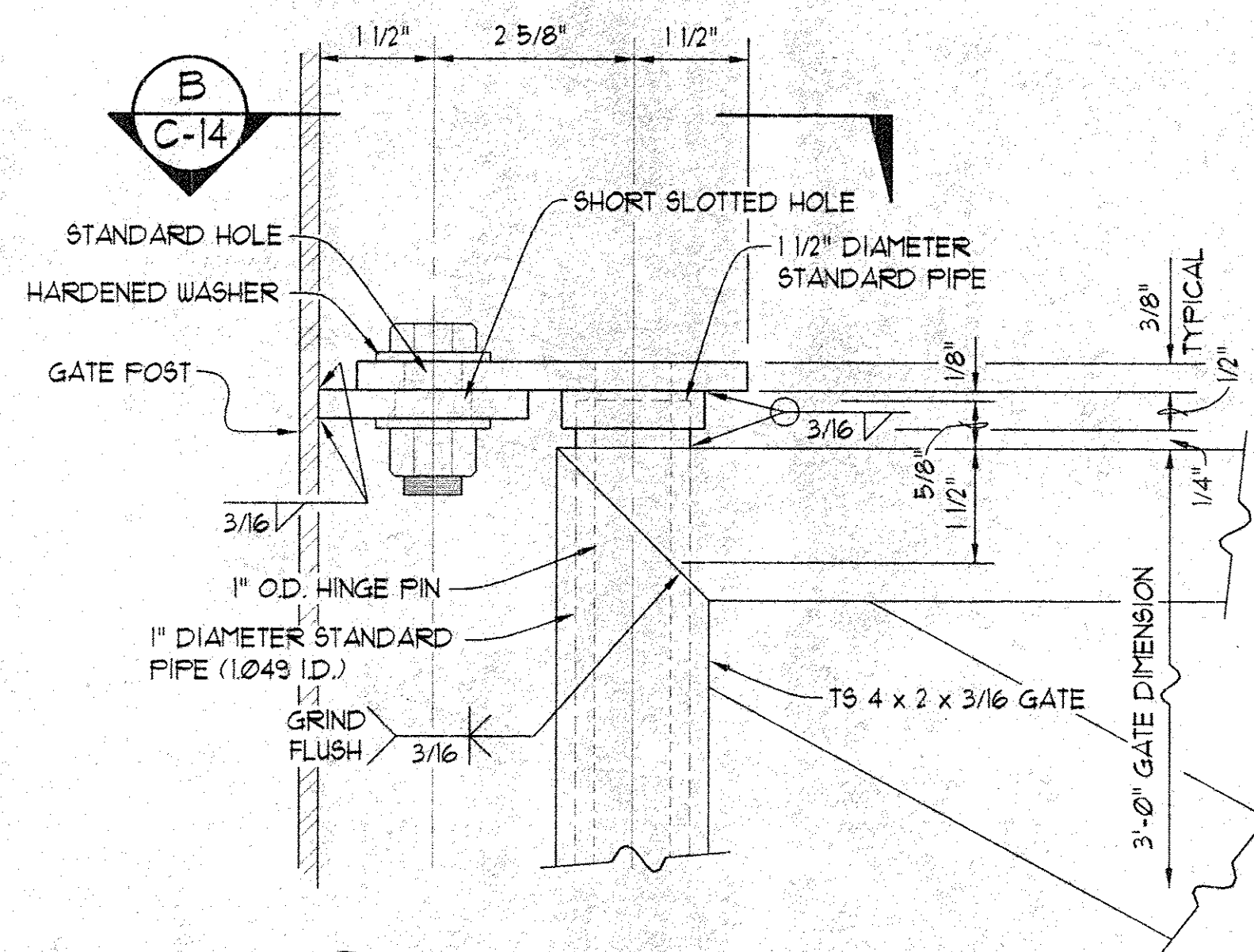


# NOTES FOR GATE

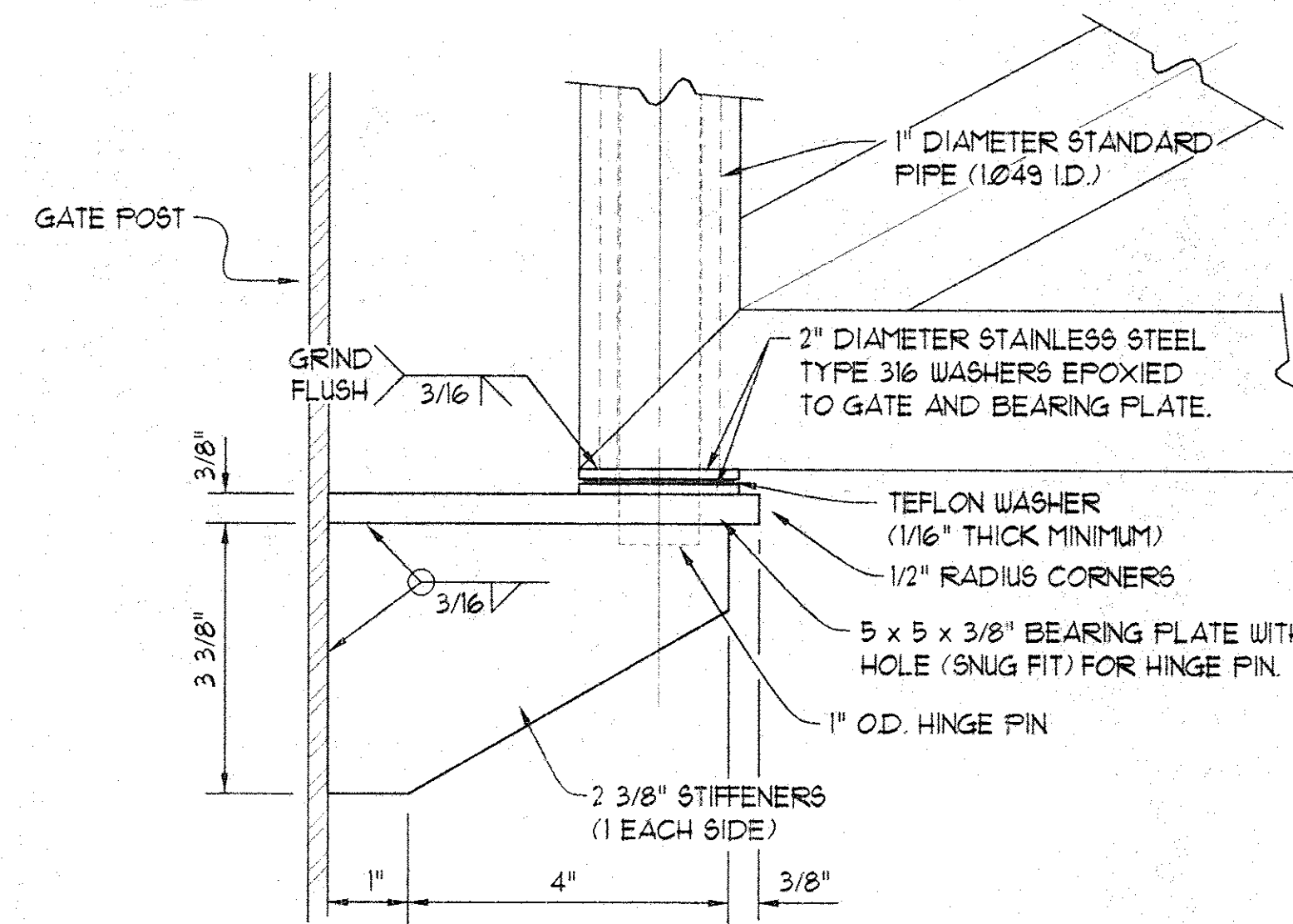
- DISCREPANCIES - CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AND SHALL REPORT ANY DISCREPANCIES IN WRITING TO THE ENGINEER BEFORE COMMENCING WORK OR ORDERING MATERIALS.
- UNLESS OTHERWISE NOTED, ALL STRUCTURAL STEEL MEMBERS, ANGLES, ETC., SHALL CONFORM TO ASTM A36 OR ASTM A500 AS APPLICABLE, AND SHALL BE HOT-DIPPED GALVANIZED (G30) AFTER FABRICATION.
- DETAILS SHOWN ON DRAWINGS SHALL BE TYPICAL FOR ALL SIMILAR CONDITIONS. MODIFY DETAILS FOR SPECIAL CONDITIONS AS DIRECTED BY THE ENGINEER.
- ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.
- SEE SPECIFICATIONS FOR PRIME COAT AND PAINT FINISH.
- UNLESS SHOWN OTHERWISE, ALL BOLTS SHALL BE A325X.



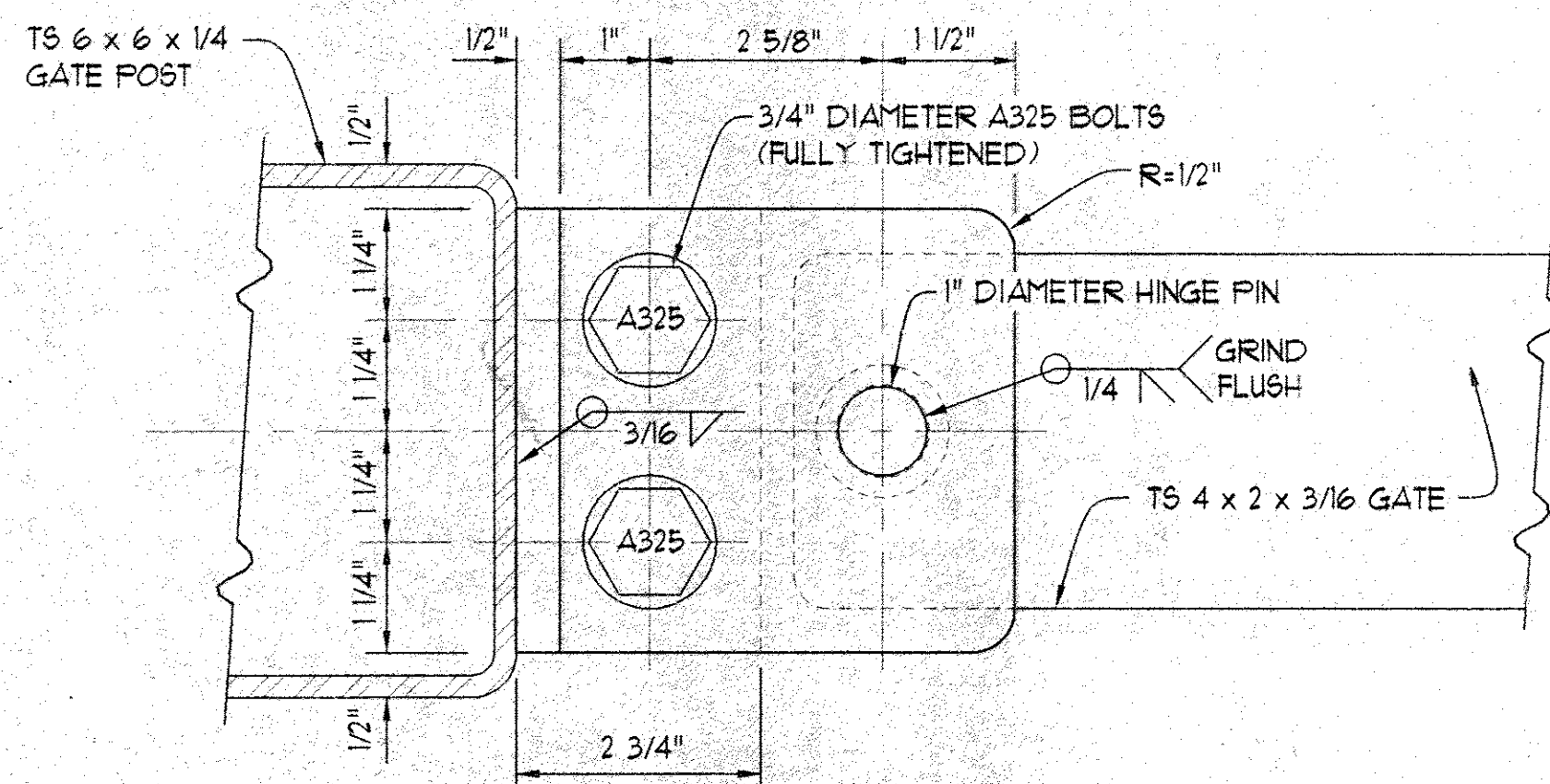
26 GATE ELEVATION  
NOT TO SCALE



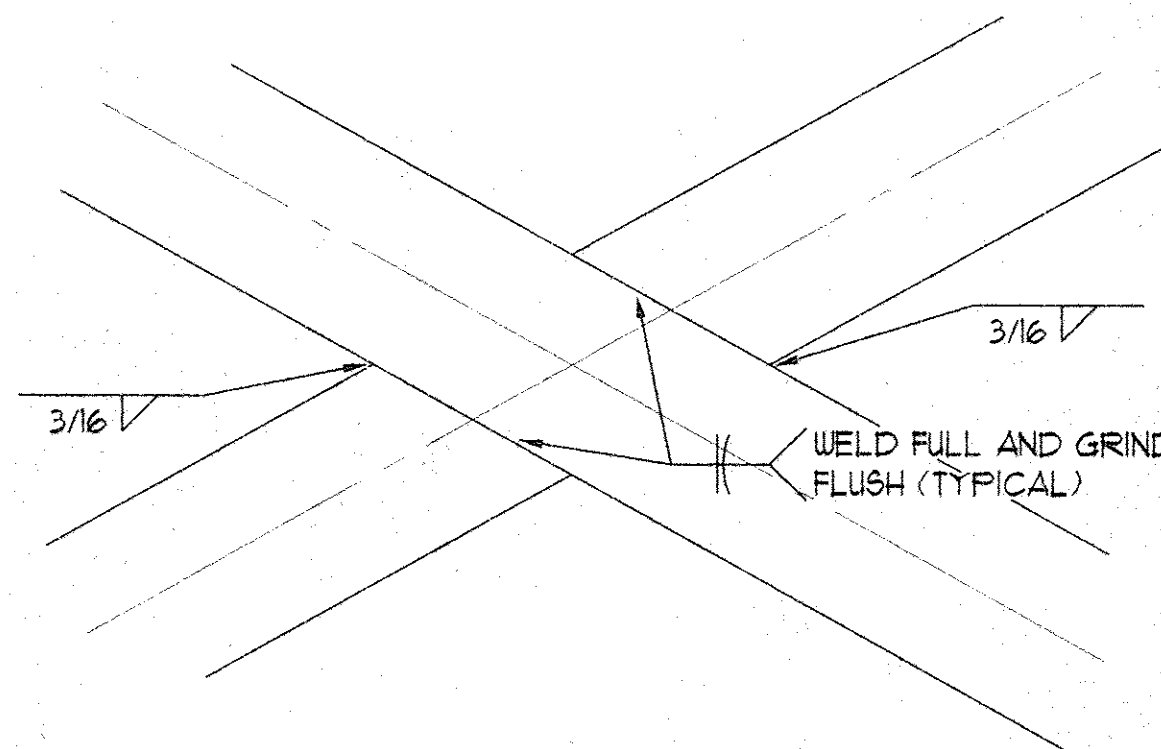
28 TOP HINGE DETAIL  
SCALE : 6" = 1'-0"



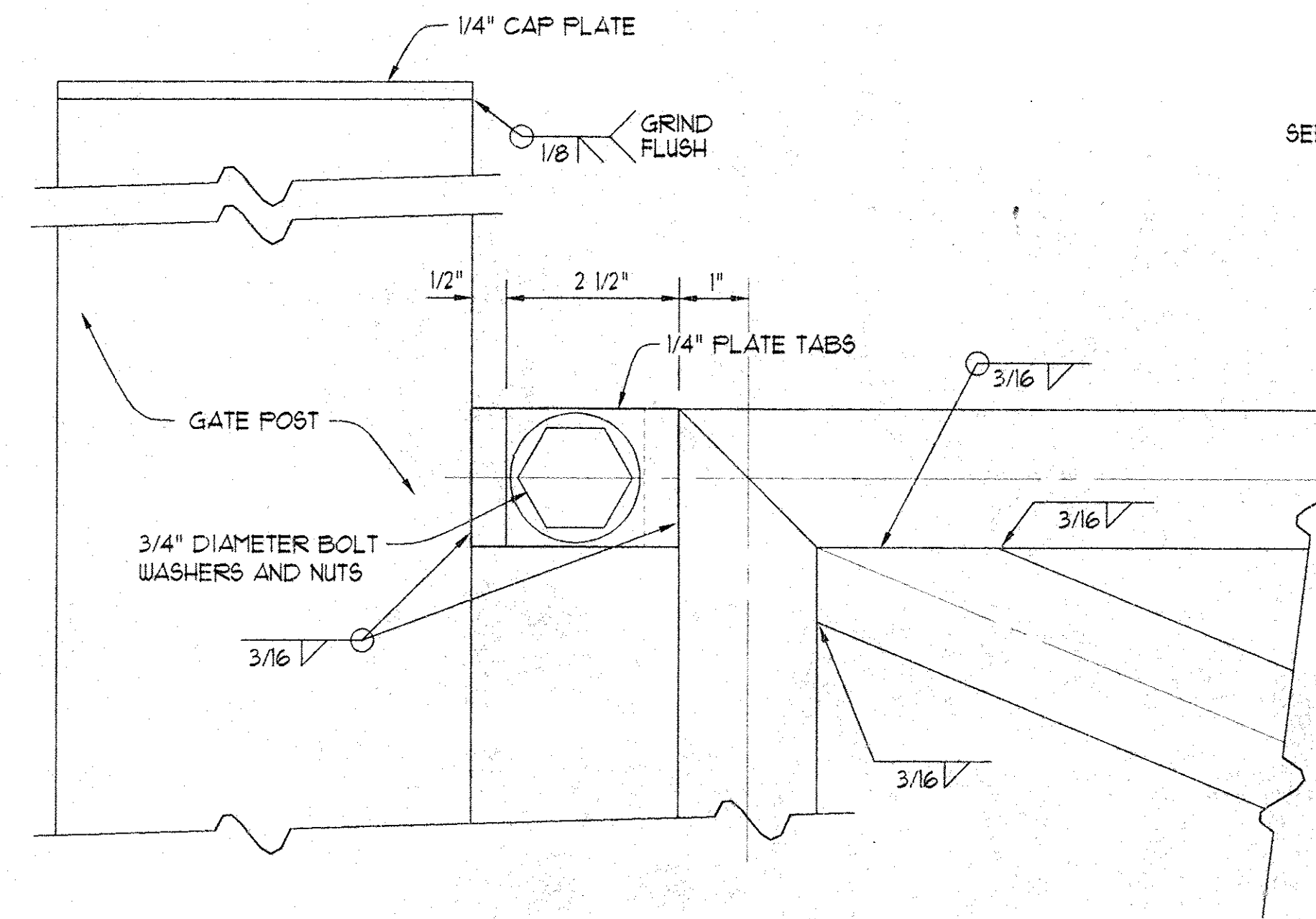
29 BOTTOM HINGE DETAIL  
SCALE : 6" = 1'-0"



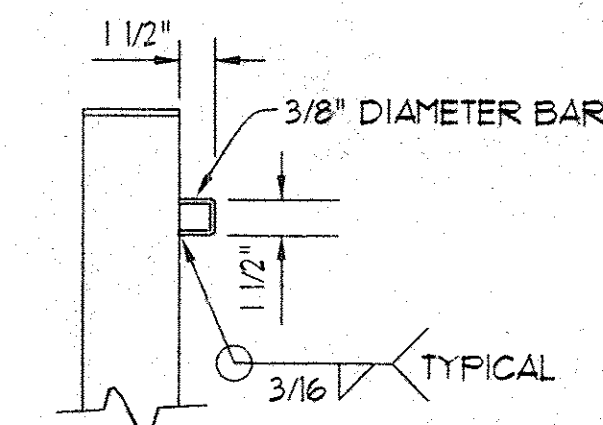
30 TOP HINGE SECTION  
SCALE : 6" = 1'-0"



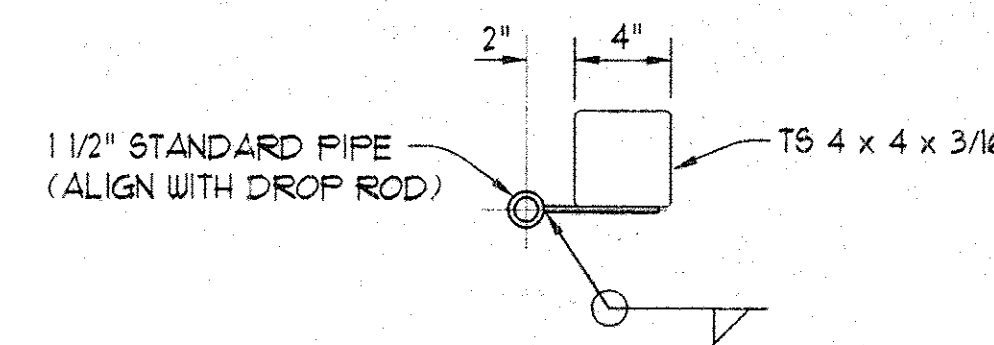
30 CROSS DETAIL  
SCALE : 6" = 1'-0"



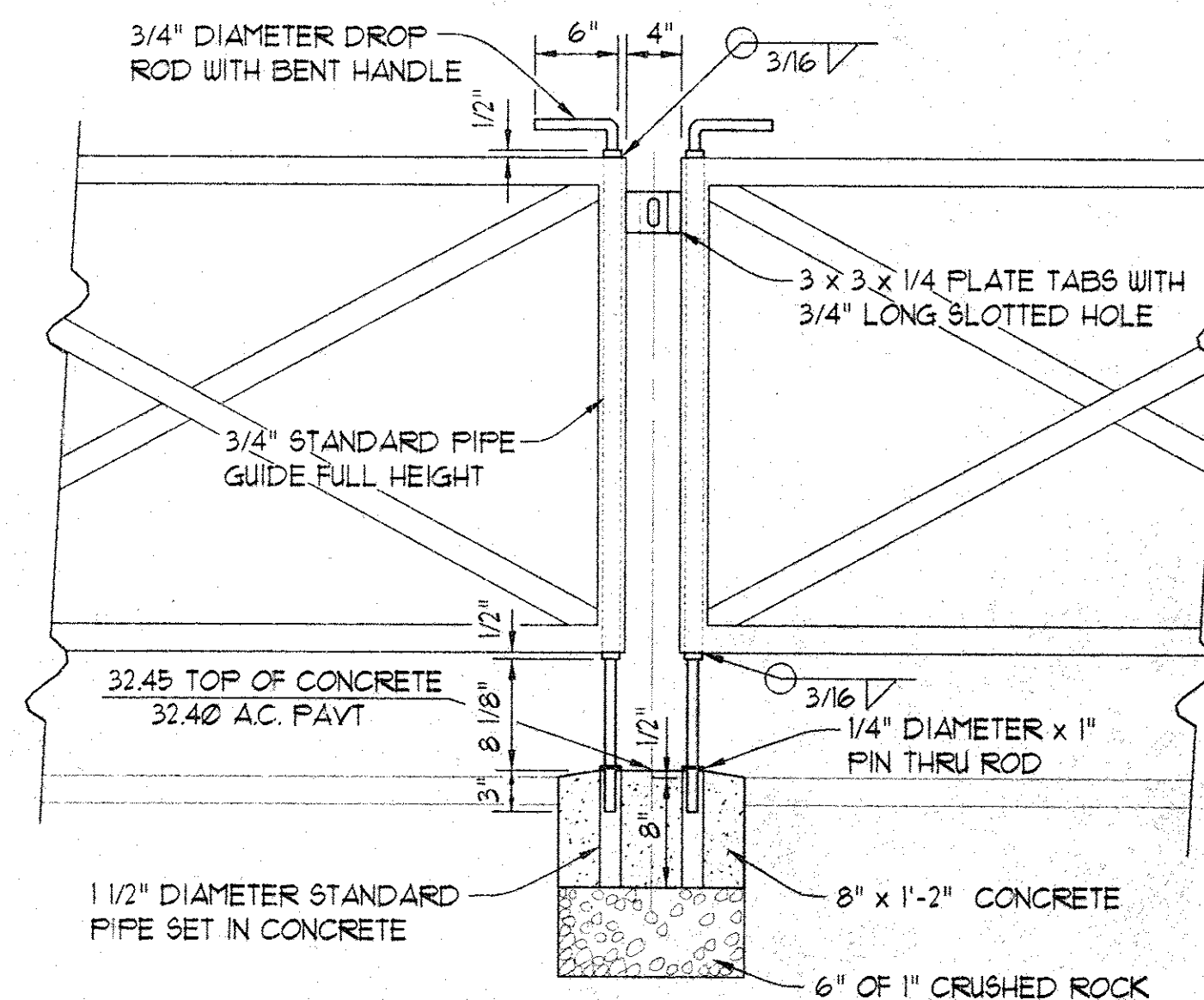
27 ATTACHMENT DETAIL  
SCALE : 6" = 1'-0"



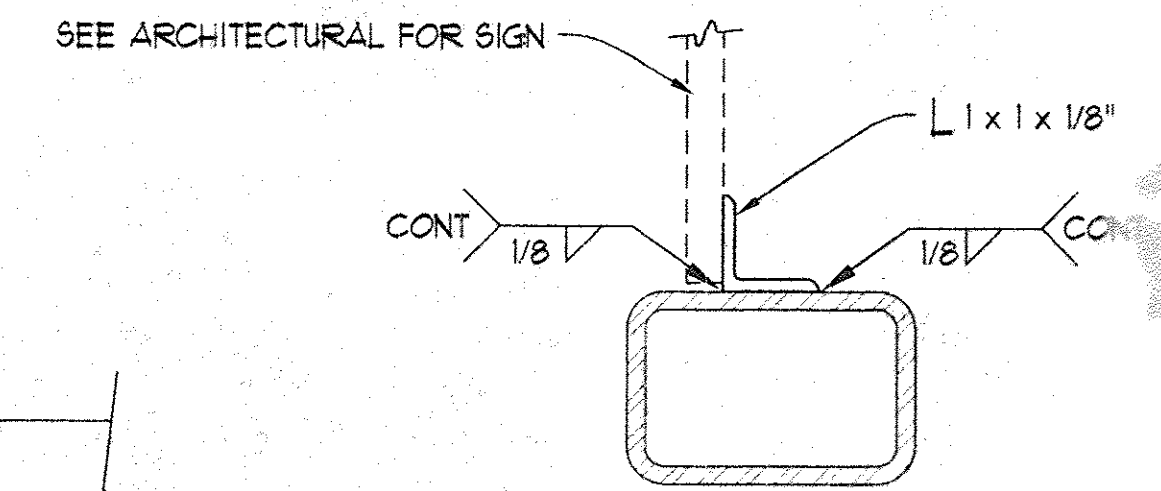
SECTION C-C



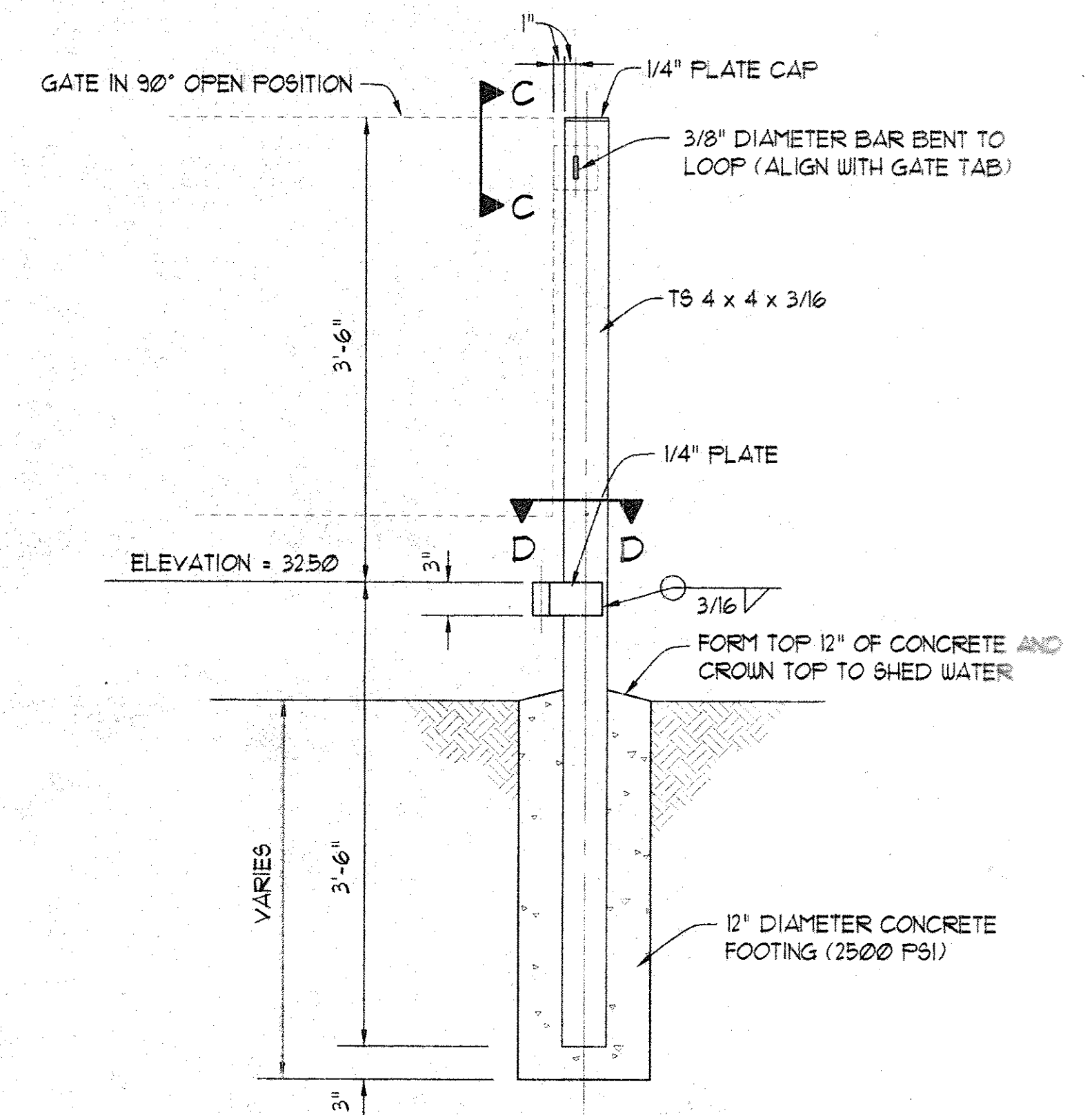
SECTION D-D



31 LATCH DETAIL  
SCALE : 1" = 1'-0"



A SIGN CONNECTION DETAIL  
SCALE : 6" = 1'-0"



32 BOLLARD/KEEPER DETAIL  
SCALE : 1" = 1'-0"

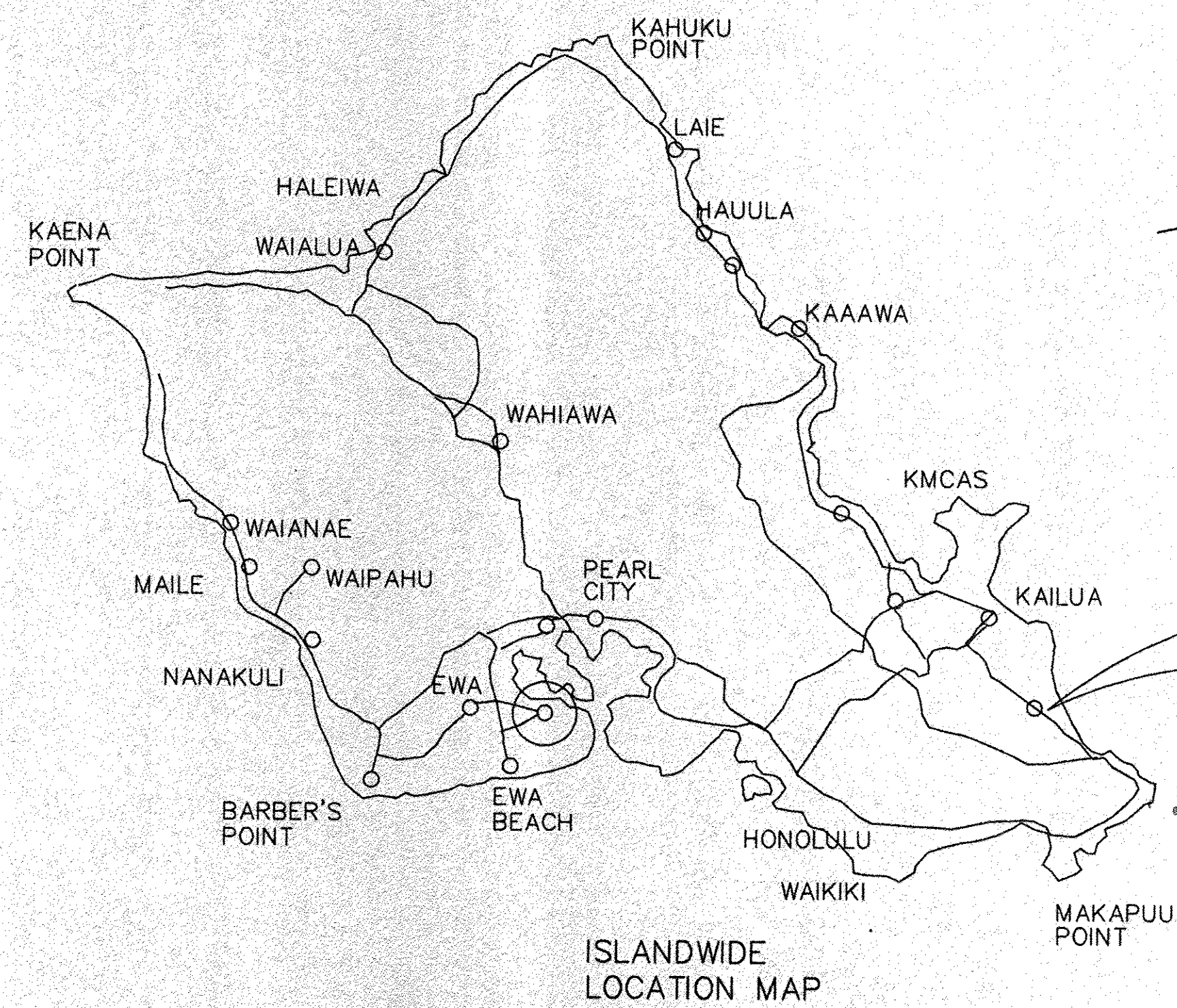
REVISION NO.	DESCRIPTION	DATE	APPROVED BY
<p><b>ENGINEERING SOLUTIONS, INC.</b> Consulting Engineers 98-021 Kamehameha Highway • Suite 211 • Aiea • Hawaii 96701</p> <p><b>WAIMANALO TEEN PROJECT</b> TAX MAP KEY : 4 - 01 - 09 : 01 LOT 8</p> <p><b>GATE DETAILS</b></p>			
DESIGNED BY : REF	CHECKED BY : JUN	ESI PROJ. NO. : 8509	C-14
DRAWN BY : LSA	DATE : 01-21-97	SCALE : AS SHOWN	

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

RICHARD E. FREY  
LICENSED PROFESSIONAL ENGINEER  
No. 7613-D  
HAWAII, U.S.A.

DATE: 09/27/96  
SCALE: AS SHOWN  
FILE: 9503





ISLANDWIDE  
LOCATION MAP

WAIMANALO  
PROJECT LOCATION

KAKINA STREET

EXTG.  
HOUSING

KAAUMANA PLACE

COMMUNITY GARDENS  
(N.I.C.)

AGRICULTURAL  
FIELDS (N.I.C.)

NEW BLDG.

PARKING

NEW BLDG.

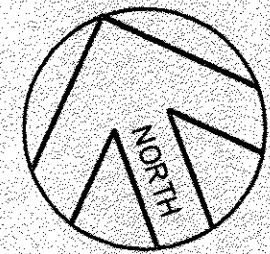
PARKING

APPROX. LIMITS OF  
LANDSCAPE IMPROVEMENTS

EXISTING NATURAL  
VEGETATION TO  
REMAIN

EXISTING NATURAL  
VEGETATION TO  
REMAIN

EXTG.  
HOUSING



HIHIMANU STREET (CITY)

Waimanalo  
Teen Project

41-487 HIHIMANU STREET  
TMK: 4-1-009: 001 (POR)

landscape  
plan

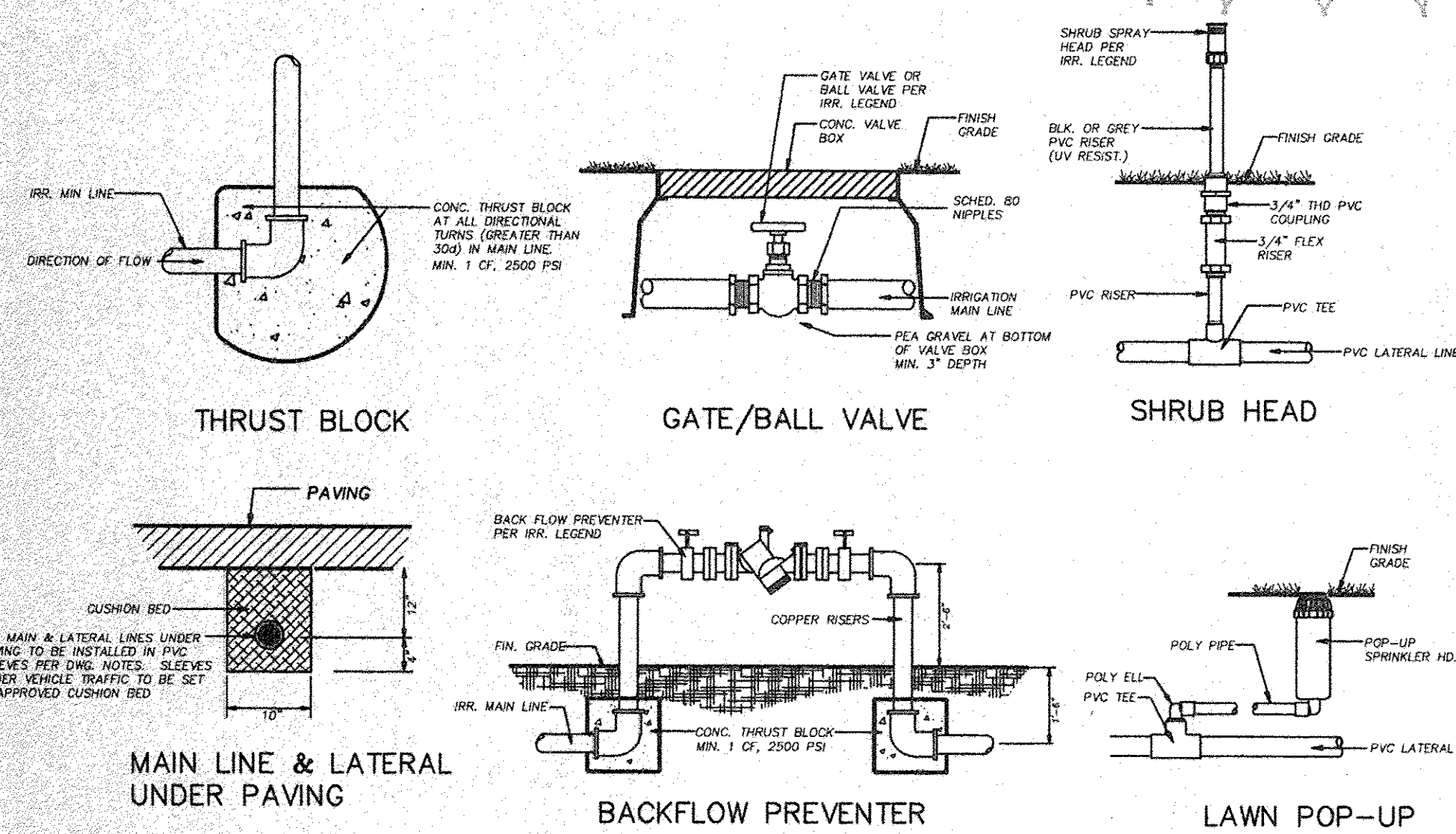
LAND ARCHITECT  
41-487 HIHIMANU STREET  
41-487 HIHIMANU STREET  
41-487 HIHIMANU STREET







H I M A N U STREET



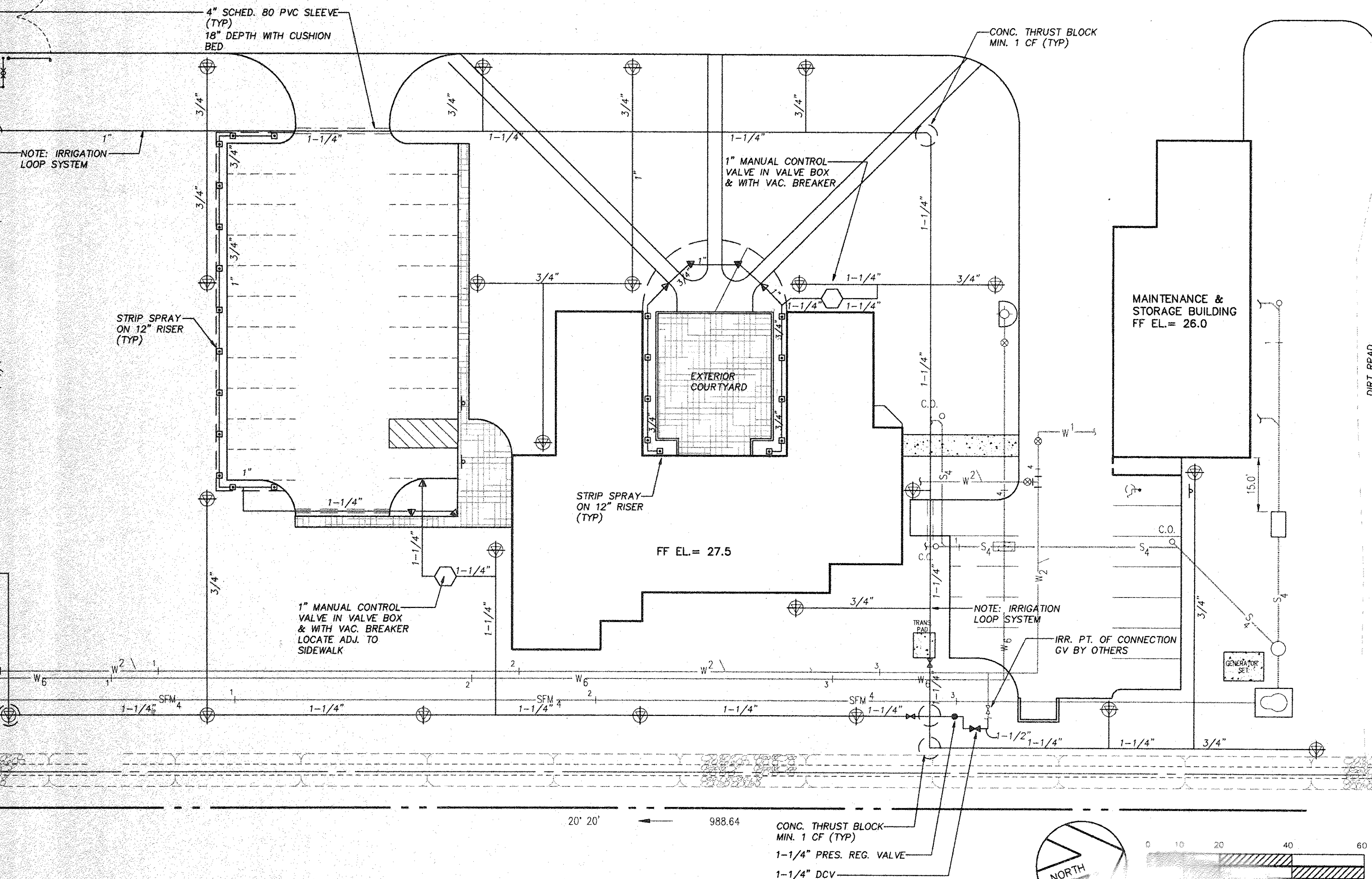
IRRIGATION LEGEND	
SYMBOL	DESCRIPTION
	BUCKNER 22000 MANUAL CONTROL VALVE, BRONZE, IN VALVE BOX WITH ATMOSPHERIC VACUUM BREAKER
	1-1/4" DCV, FEBCO OR EQUAL (BWS APPROVED) COPPER RISERS
	1-1/4" PRESSURE REGULATION VALVE IN VALVE BOX
	BRONZE BALL VALVE, FULL PORT, HONEYWELL BRAUKMANN OR EQUAL MATCH LINE SIZE, INSTALL IN VALVE BOX
	BUCKNER 25013 QUICK COUPLING VALVE PROVIDE 4 BUCKNER QUICK COUPLING KEY NO. 25014 WITH BUCKNER BRONZE IMPACT HDS. W/ BREAK UP NOZZLE NO. 10041/03 11/64" NOZZLE, 47" RAD. 6 GPM @ 50 PSI
	IRRIGATION PT. OF CONNECTION, GATE VALVE BY OTHERS VERIFY & COORDINATE W/ GENERAL CONTRACTOR
	RAINBIRD 1806-SAM-PRS-U-15F
	RAINBIRD 1806-SAM-PRS-U-15H
	RAINBIRD 1806-SAM-PRS-U-15Q
	RAINBIRD 1800-SAM-15SST ON 12" RISER
	SCHED. 40 PVC IRRIGATION LATERAL LINE SIZE PER DWG. PLACE IN 12" DEEP TRENCH WITH CUSHION BED
	4" SCHED. 80 PVC SLEEVE UNDER ROADWAY WITH CUSHION BED

#### IRRIGATION GENERAL NOTES

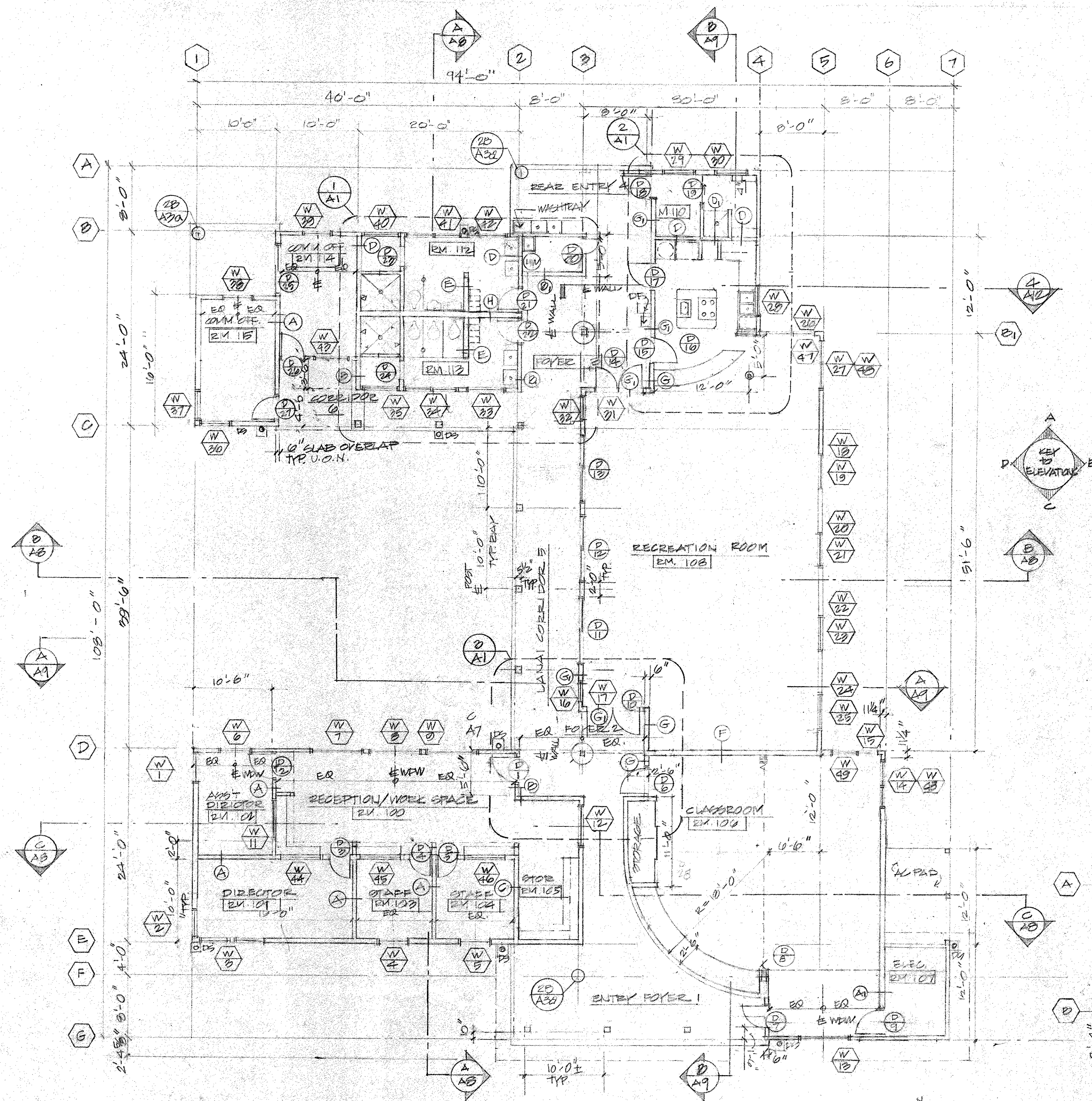
1. The Irrigation Contractor is responsible for coordinating all irrigation work with the Contractor. Verify all site conditions to include but not limited to the irrigation water, adequate water pressure (min. 50 psi), placement of sleeves under paving, placement, and availability of electricity for the irrigation controller. Notify the General Contractor's Representative immediately if there are any discrepancies. Commencement of the Irrigation Contractor shall indicate acceptance of the conditions.
2. The irrigation plan is diagrammatic. Irrigation Contractor is responsible for installing all new irrigation systems in a manner that follows the plan of the installation of all equipment in accordance with the design, irrigation specifications, practices and manufacturer's instructions. Placement of backflow preventer, control valves and the irrigation main line shall be staked and/or marked prior to installation for the Owner's Representative.
3. Concrete thrust blocks (min. 1 cf) shall be installed at all directional turns along the main line. No irrigation trenches shall be backfilled prior to paving. Repair any damage to the Owner's Representative at least 3 calendars in advance.
4. All irrigation lines which cross paved areas, parking lots or roadways shall be installed in 12" deep trenches with schedule 80 PVC sleeves. All sleeves shall be set on a cushion bed and backfilled with material approved by the Owner's Representative.
5. No substitution to irrigation equipment shall be allowed without the express approval of the Owner's Representative. Irrigation Contractor to submit change orders and specifications for all irrigation equipment prior to commencing work. Irrigation Contractor provide complete set of shop drawings, equipment manuals, warranties, spare parts list, completion of the maintenance period.
6. Upon acceptance of the irrigation system, the Contractor shall maintain the system for a period equal to the warranty period. The Contractor shall be responsible for any corrections to the system for a period equal to the warranty period. The Contractor shall be responsible for any corrections to the system for a period equal to the warranty period. The Contractor shall be responsible for any corrections to the system for a period equal to the warranty period.
7. See irrigation specifications for additional requirements.

MAX. IRR. CHG. 24  
TOTAL IRR. 700  
FIXTURE UNIT 40

note: All landscape irrigation to be done during off hours.





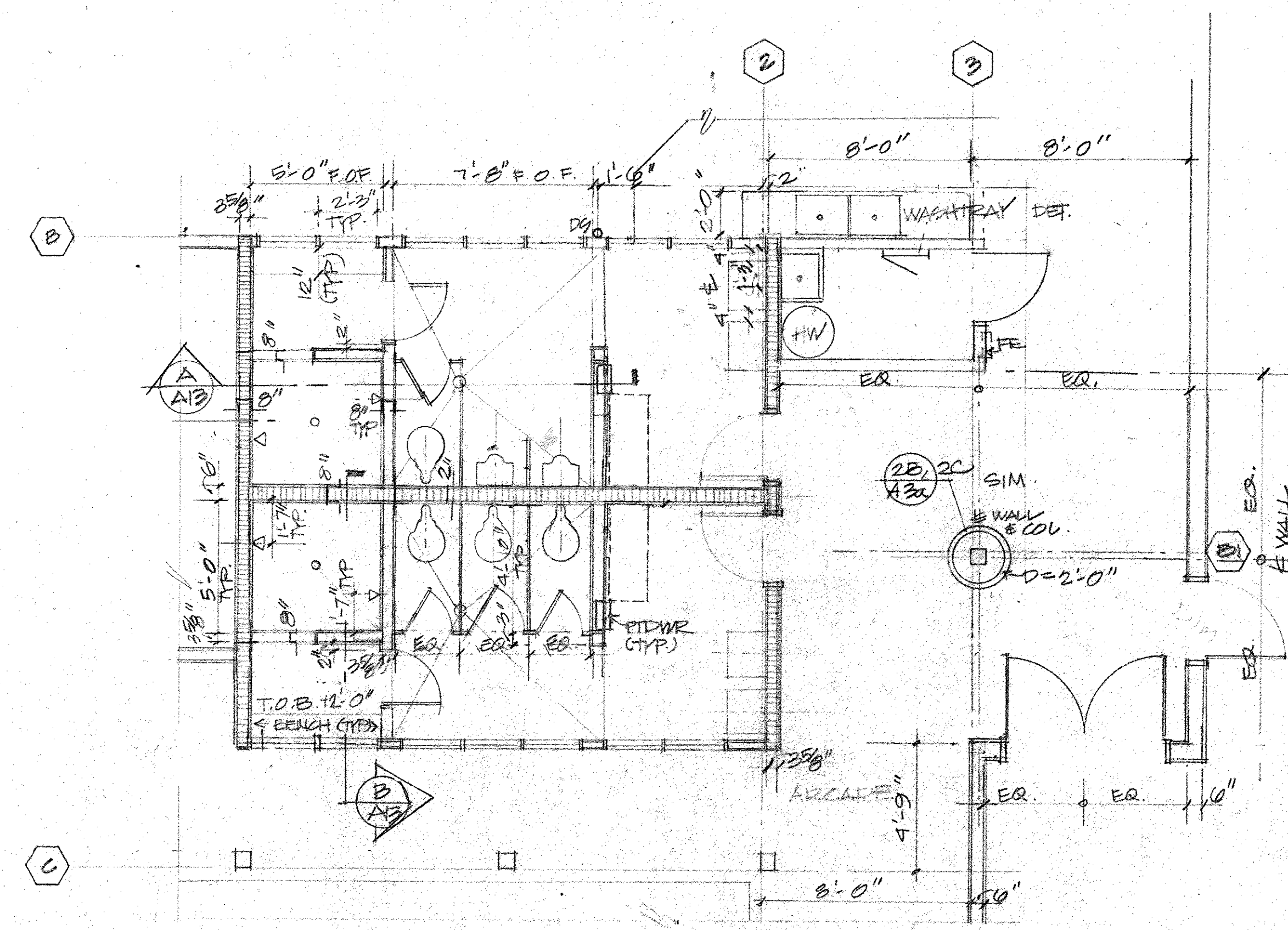


FLOOR PLAN

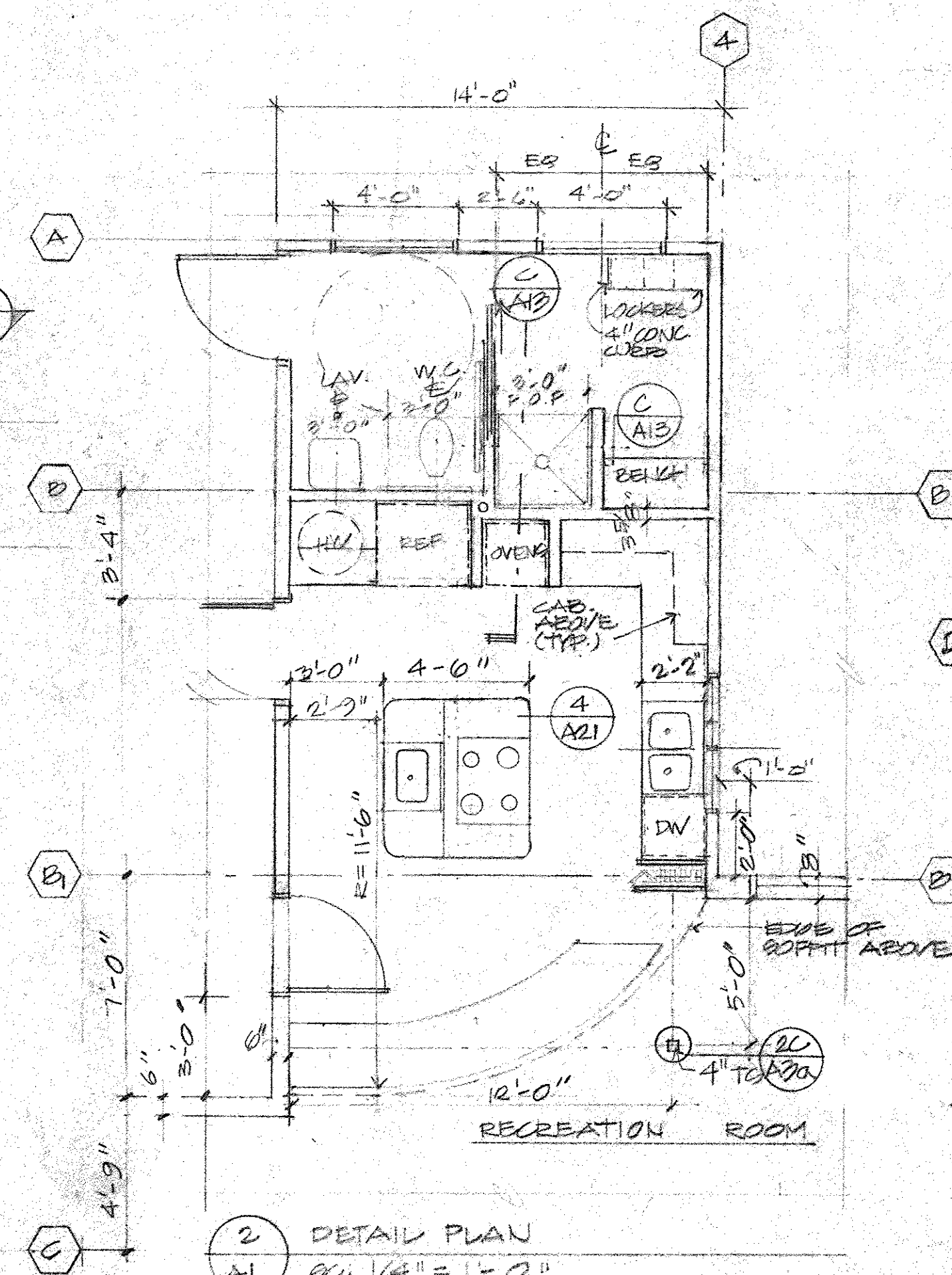
SC: 1/8" = 1'-0"

GENERAL NOTES

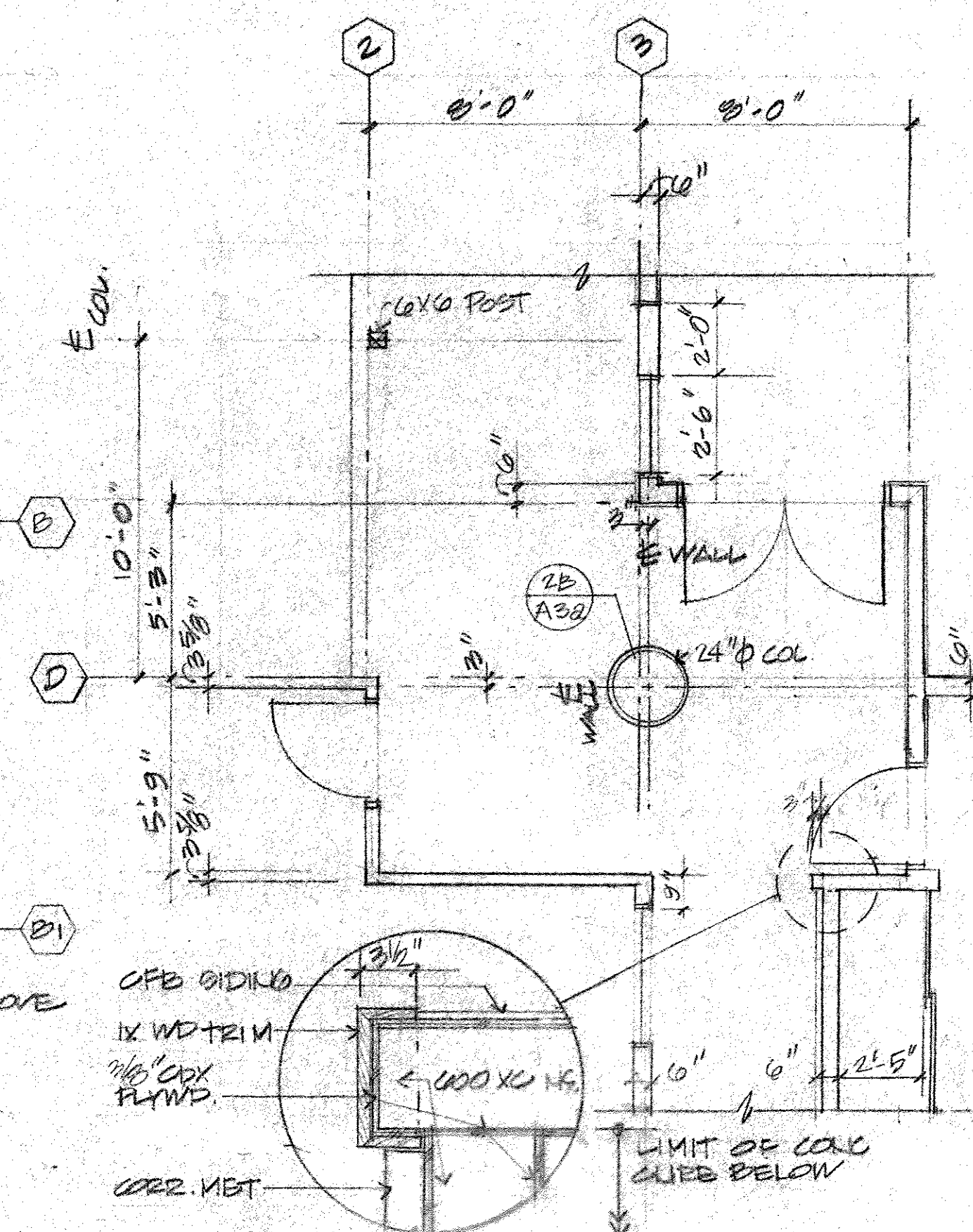
1. TYPICAL EXTERIOR WALL SECTION AT LOW BUILDING W/ 4:5<sup>12</sup> ROOF SLOPE. CONCRETE OF 24" X 20" @ 24" O.C. METAL STUDS W/ 3/8" CDX PLYND, 15# FELT, & CEMENTITIOUS FIBERBOARD SIDING (CFB) ON THE EXTERIOR, 5/8" TYP. X GYP. BD ON THE INTERIOR, W/ 5/8" X 2" CEILING JOISTS SCHEDULED, U.O.N. (SEE STRUCT.)
2. TYPICAL EXTERIOR WALL SECTION ON HIGH PORTION OF STRUCTURE W/ 7:12 ROOF SLOPE. CONCRETE OF 24" X 24" @ 24" O.C. W/ 3/8" CDX PLYND, 15# FELT, & CFB ON EXTERIOR, 5/8" TYP. X GYP. BD ON INTERIOR, U.O.N. (SEE STRUCT.)



1 DETAIL PLAN  
A1 SC: 1/4" = 1'-0"

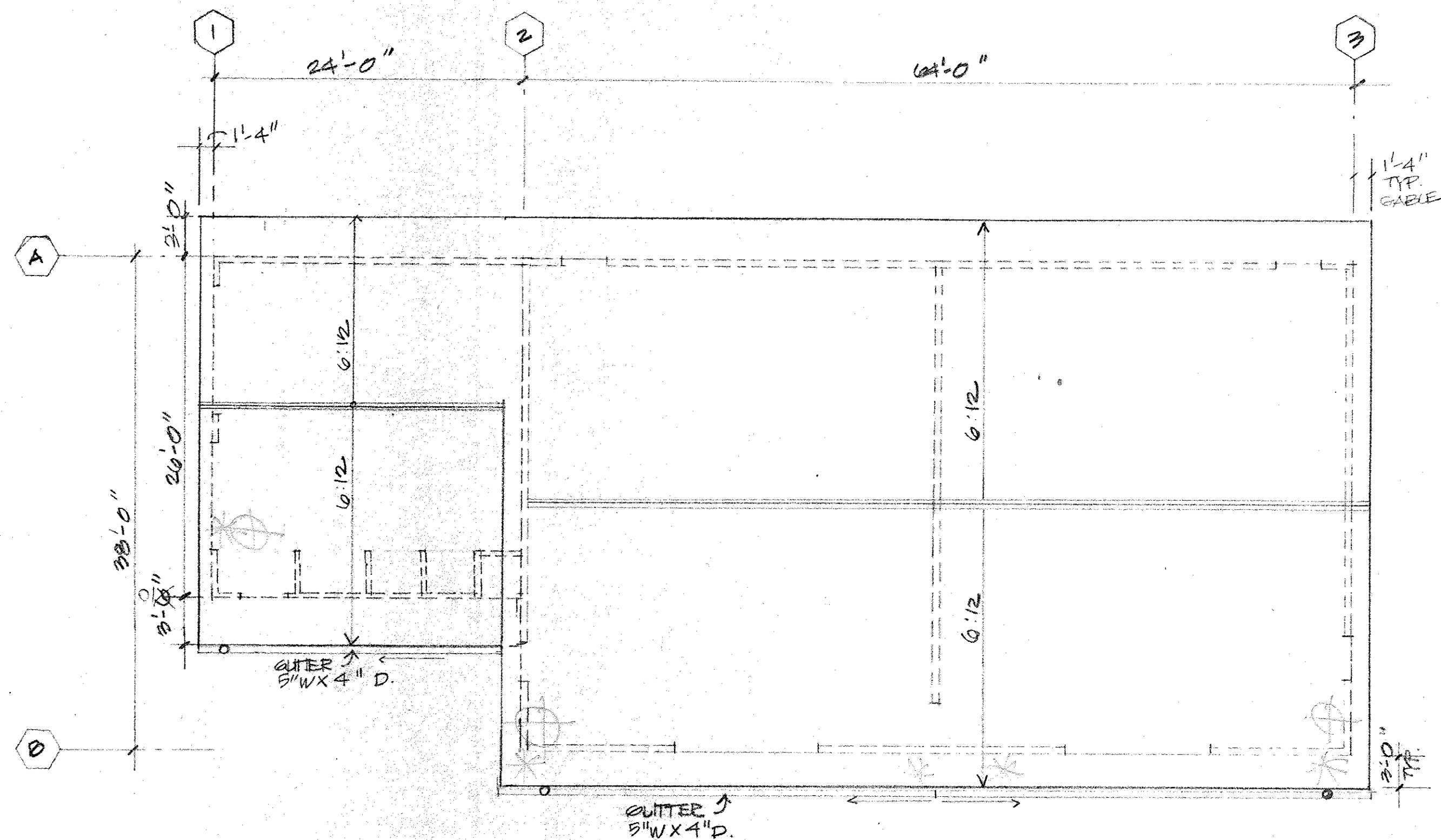


2 DETAIL PLAN  
A1 SC: 1/4" = 1'-0"

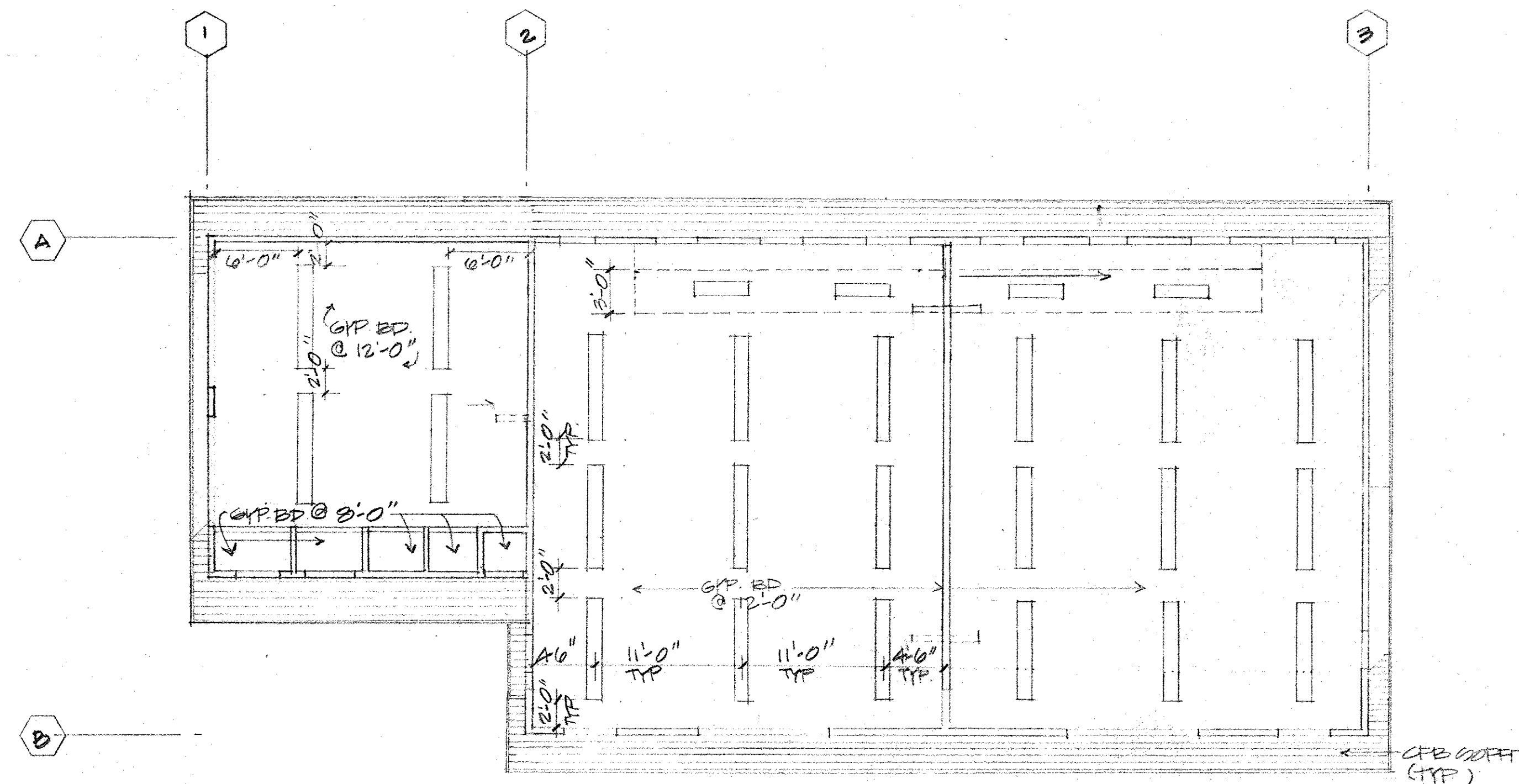


3 DETAIL PLAN  
A1 SC: 1/4" = 1'-0"

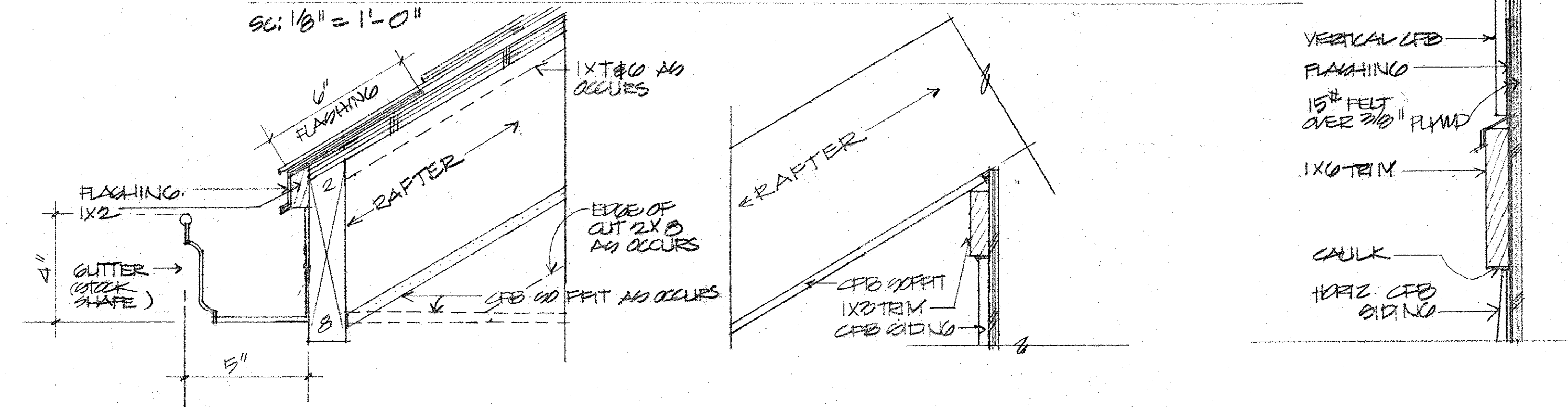




ROOF PLAN  
SC: 1/8" = 1'-0"



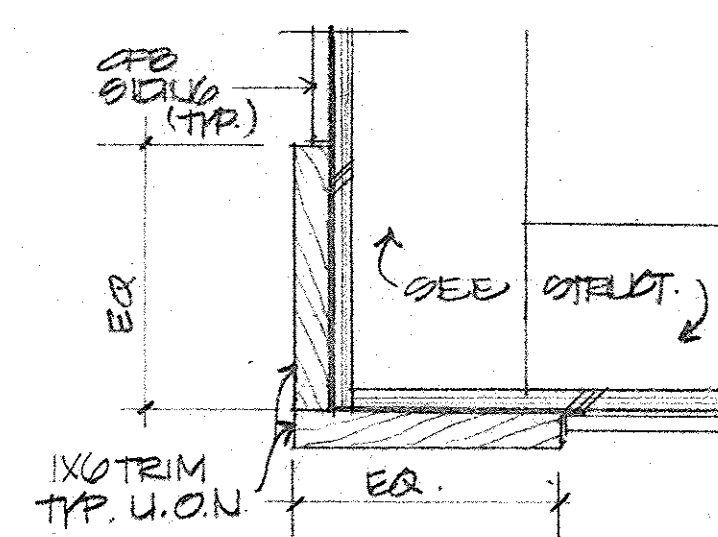
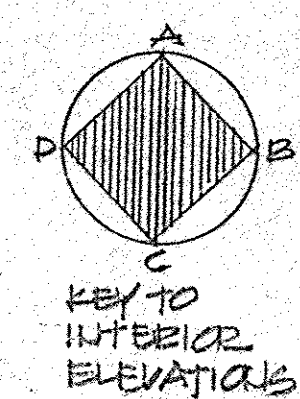
REFLECTED CEILING PLAN  
SC: 1/8" = 1'-0"



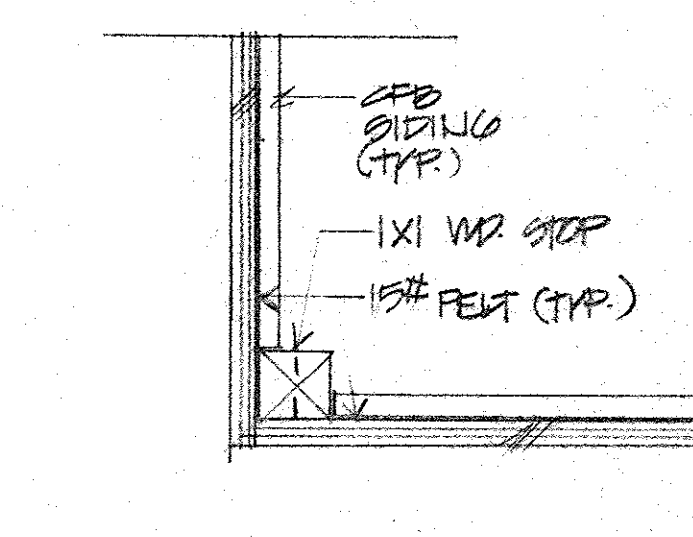
1 TYP. GUTTER DETAIL  
A2 SC: 3/8" = 1'-0"

2 TYP. TRIM @ RAFTER/WALL  
A2 SC: 3/8" = 1'-0"

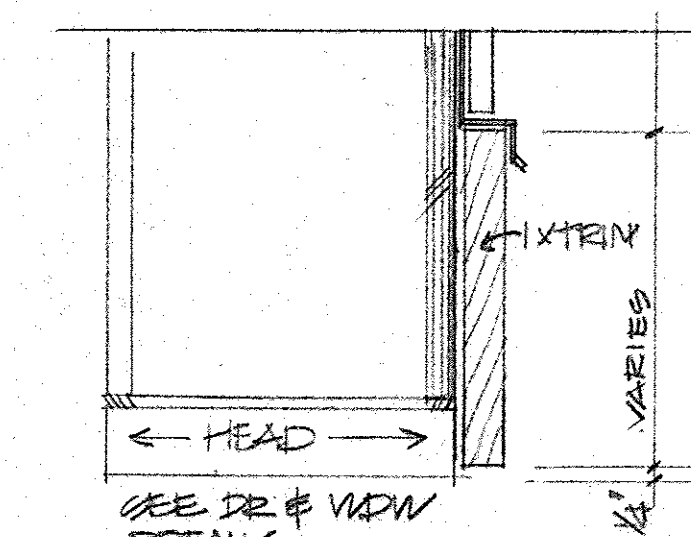
3 TYP. SIDING TRANSITION  
A2 SC: 3/8" = 1'-0"



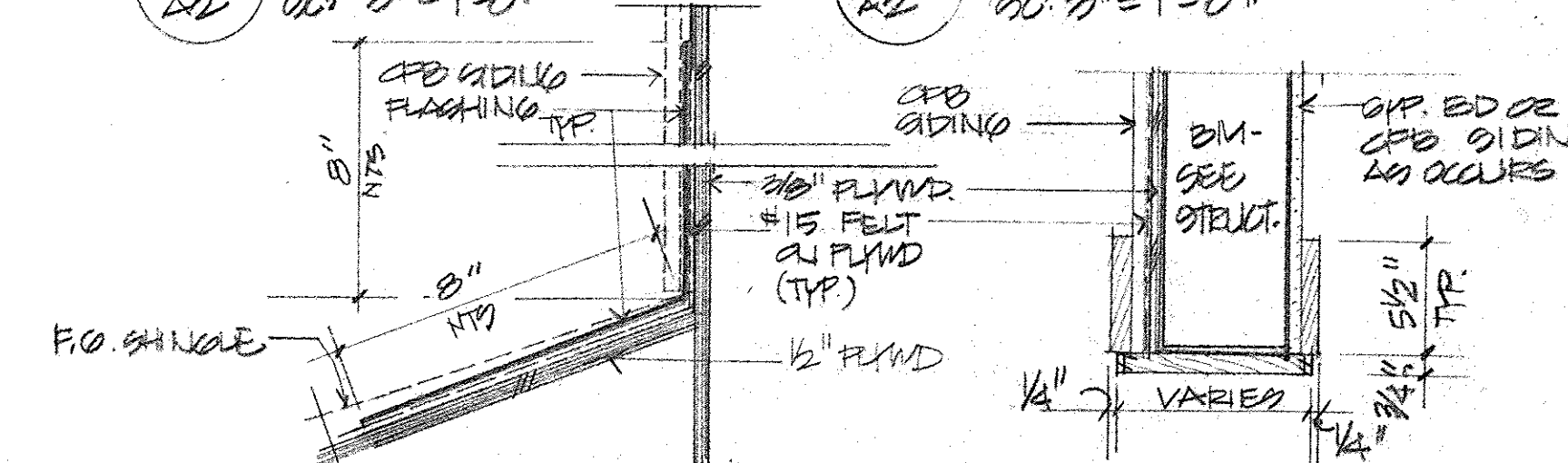
4 CORNER TRIM DETAIL  
A2 SC: 3/8" = 1'-0"



5 INSIDE CORNER @ SIDING  
A2 SC: 3/8" = 1'-0"

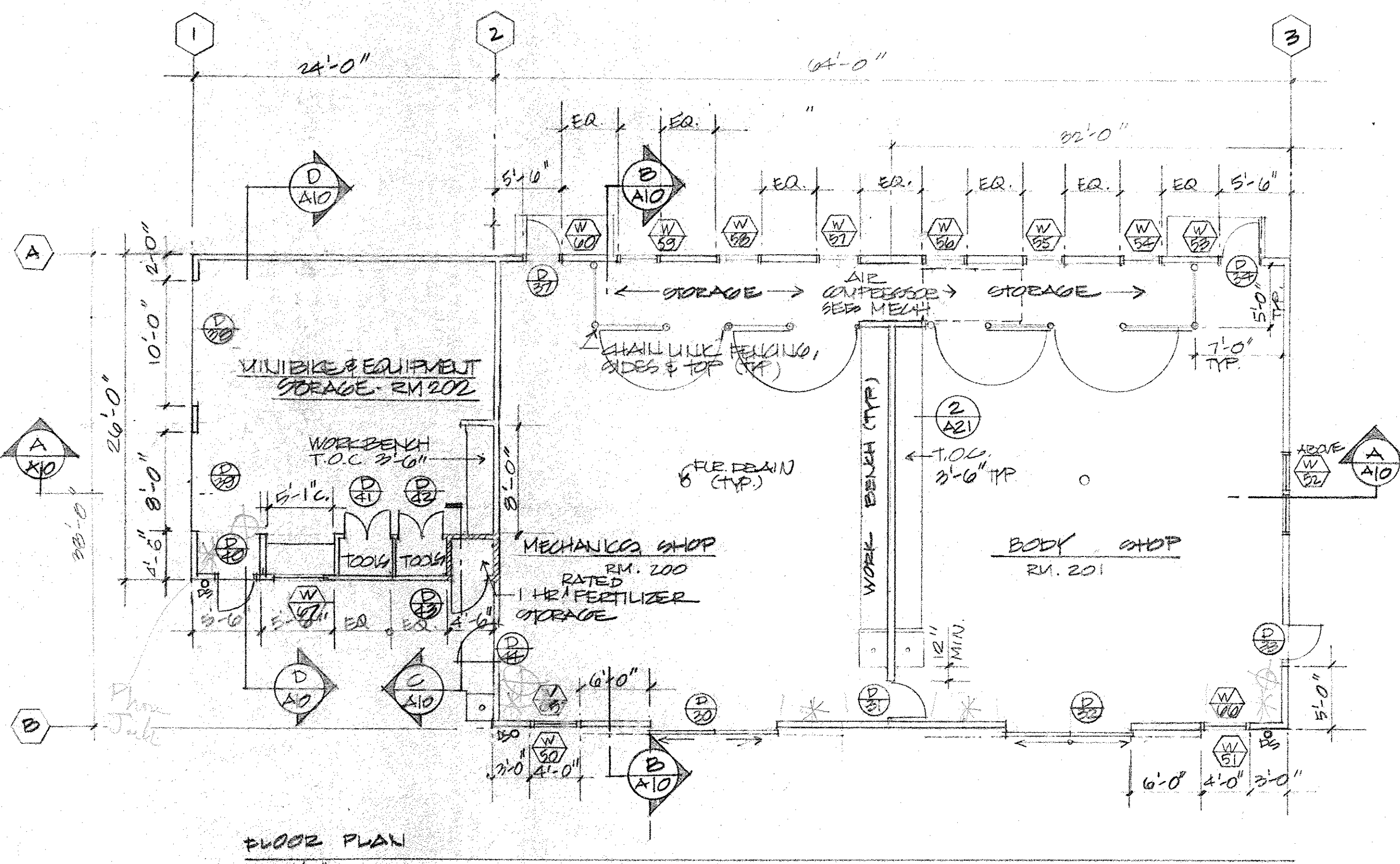


6 HEAD FLASHING @ DR & WDW.  
A2 SC: 3/8" = 1'-0"



7 FLASHING @ GED  
A2 SC: 3/8" = 1'-0"

8 TRIM @ EM. BOTTOM  
A2 SC: 1/2" = 1'-0"



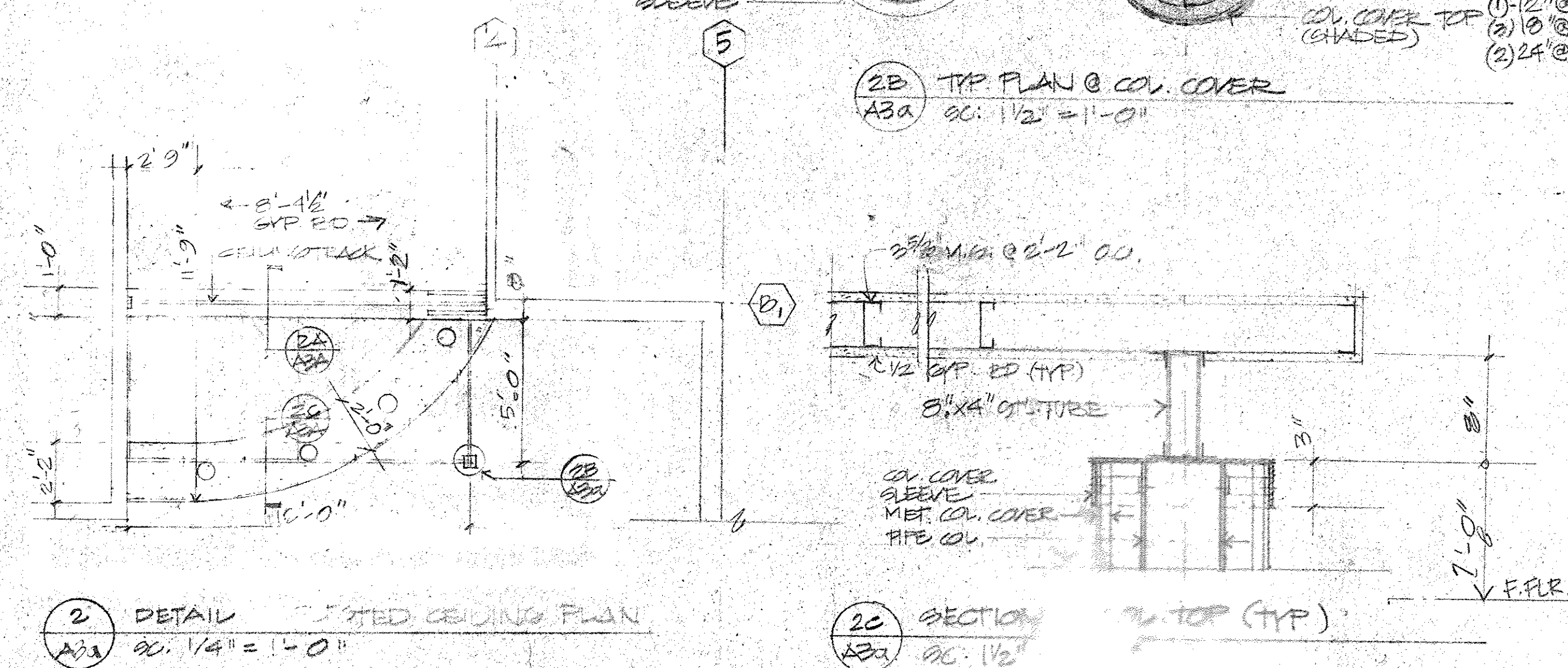
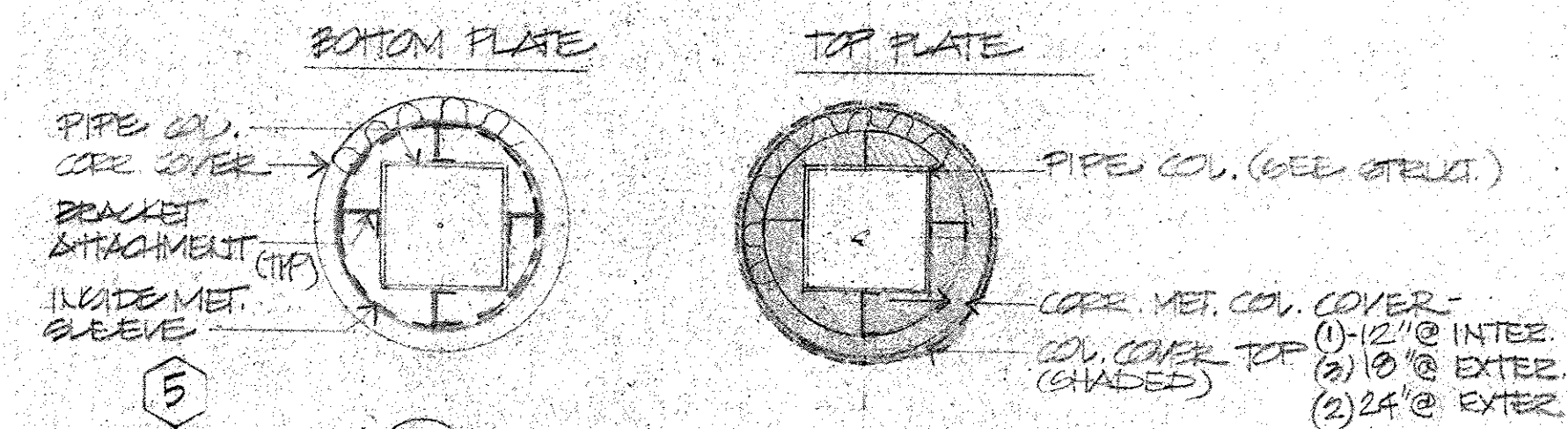
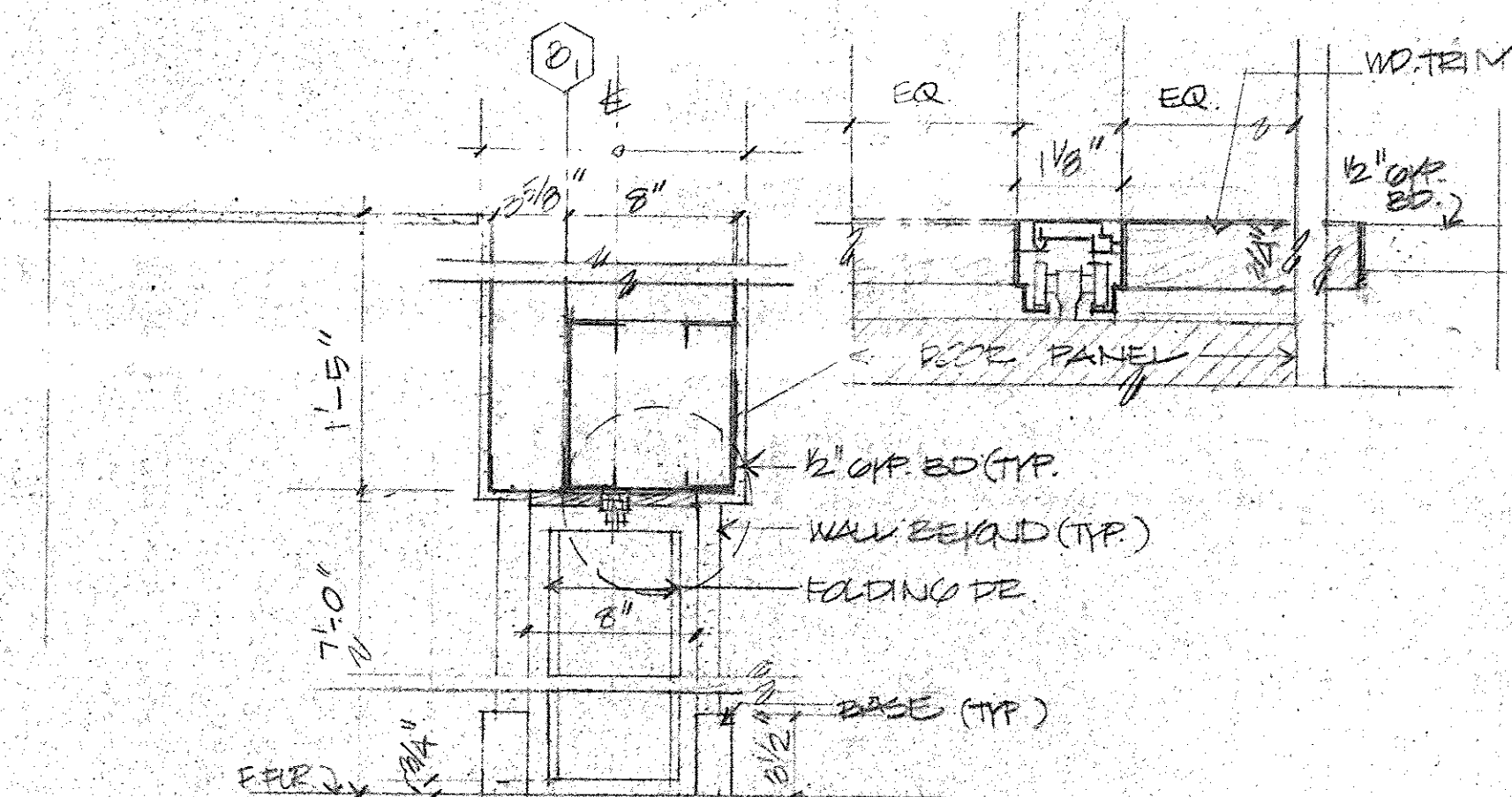
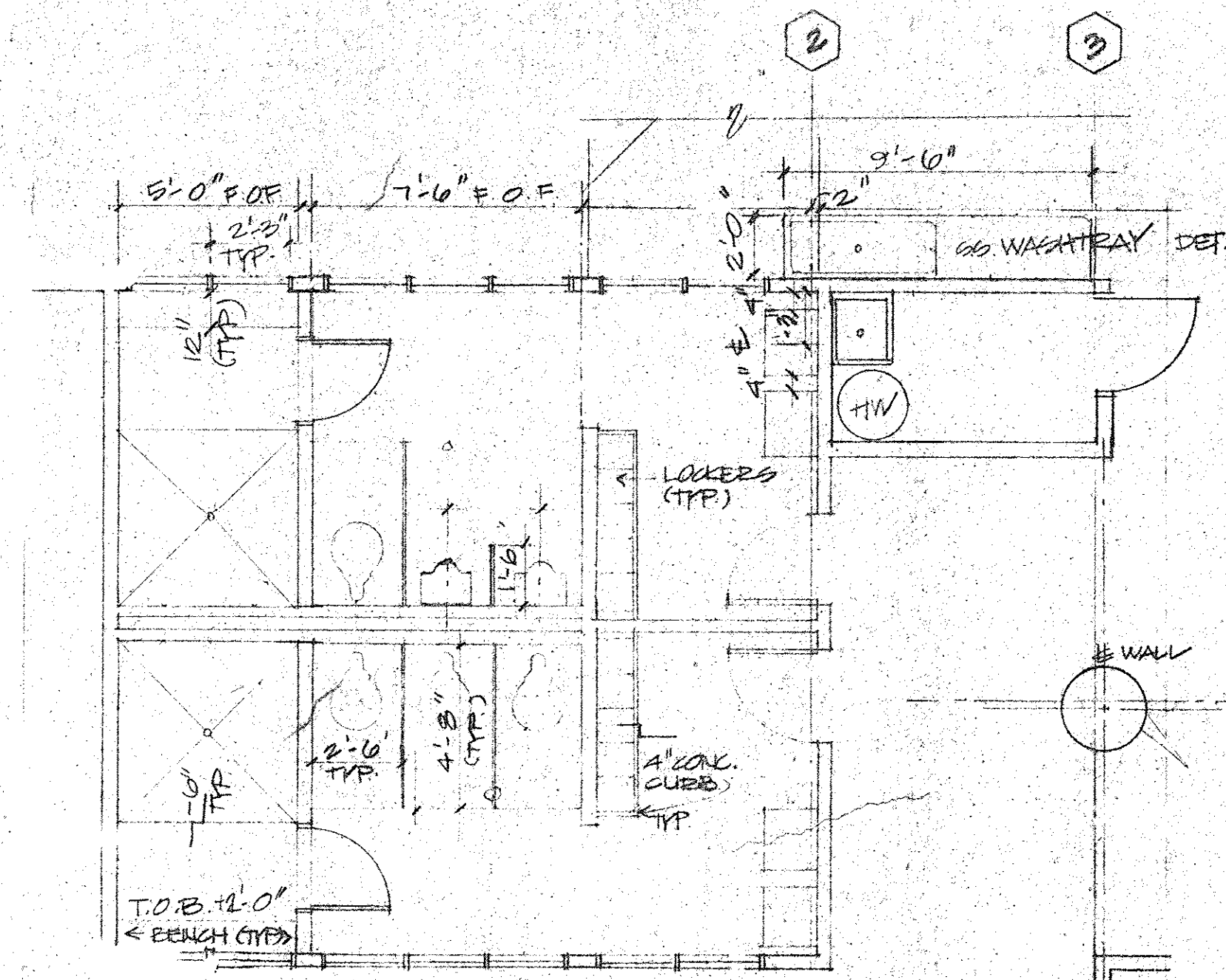
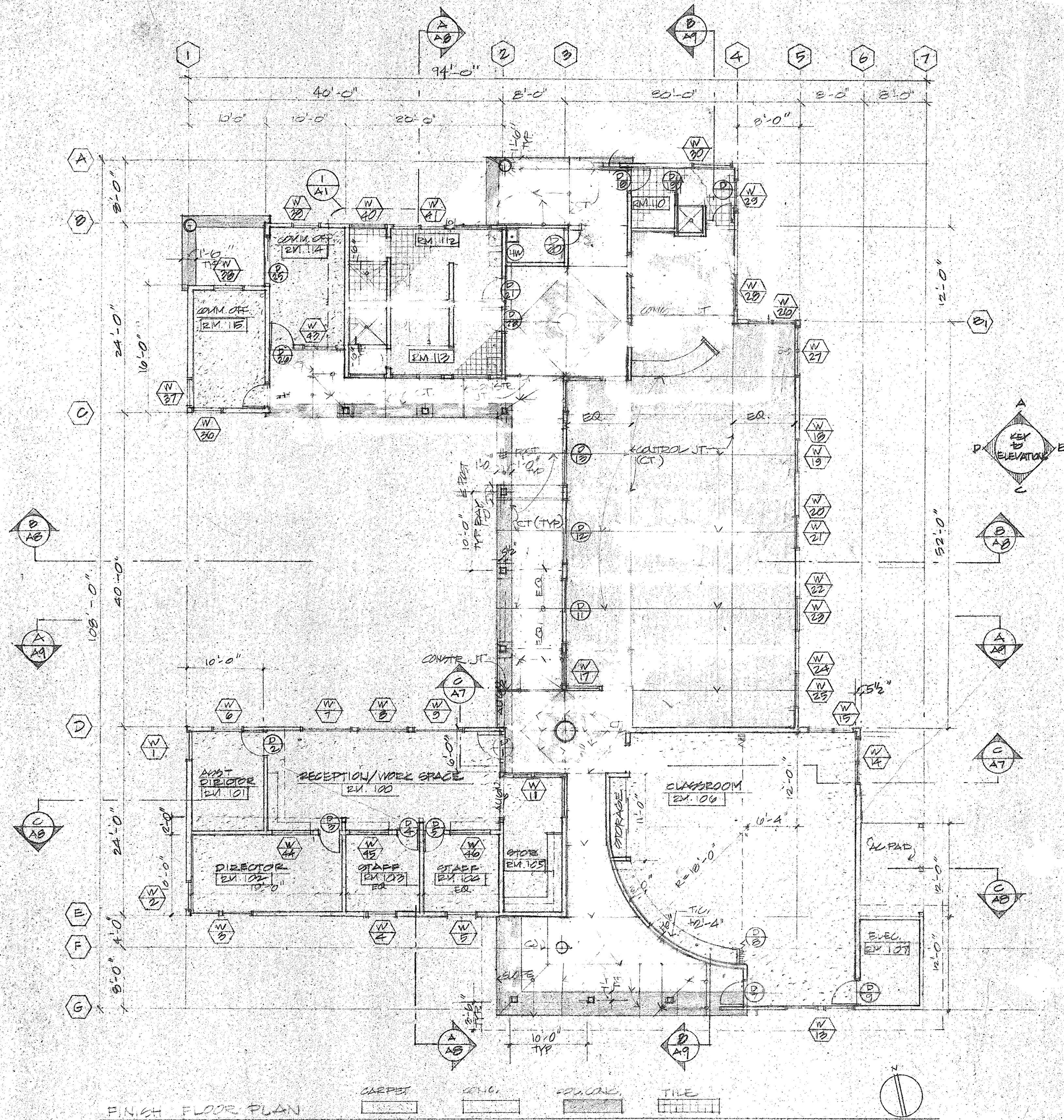
FLOOR PLAN  
SC: 1/8" = 1'-0"

Issue	Date	By











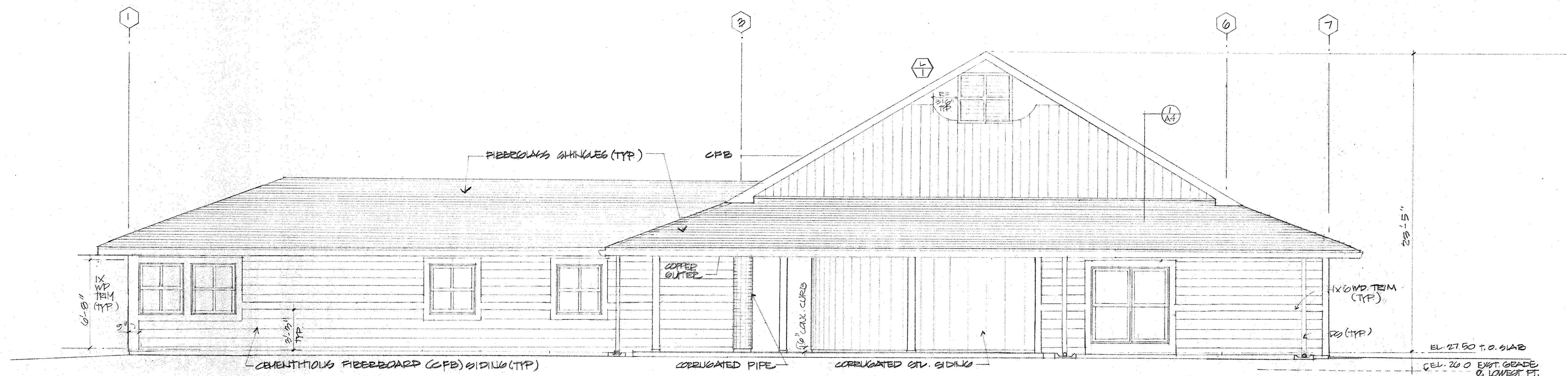
**Waimanalo Teen Project**  
41-467 Hihimanu Street  
Waimanalo, Oahu  
TMK: 4-1-009:001 265

EXTERIOR ELEVATION  
MEETING FACILITY

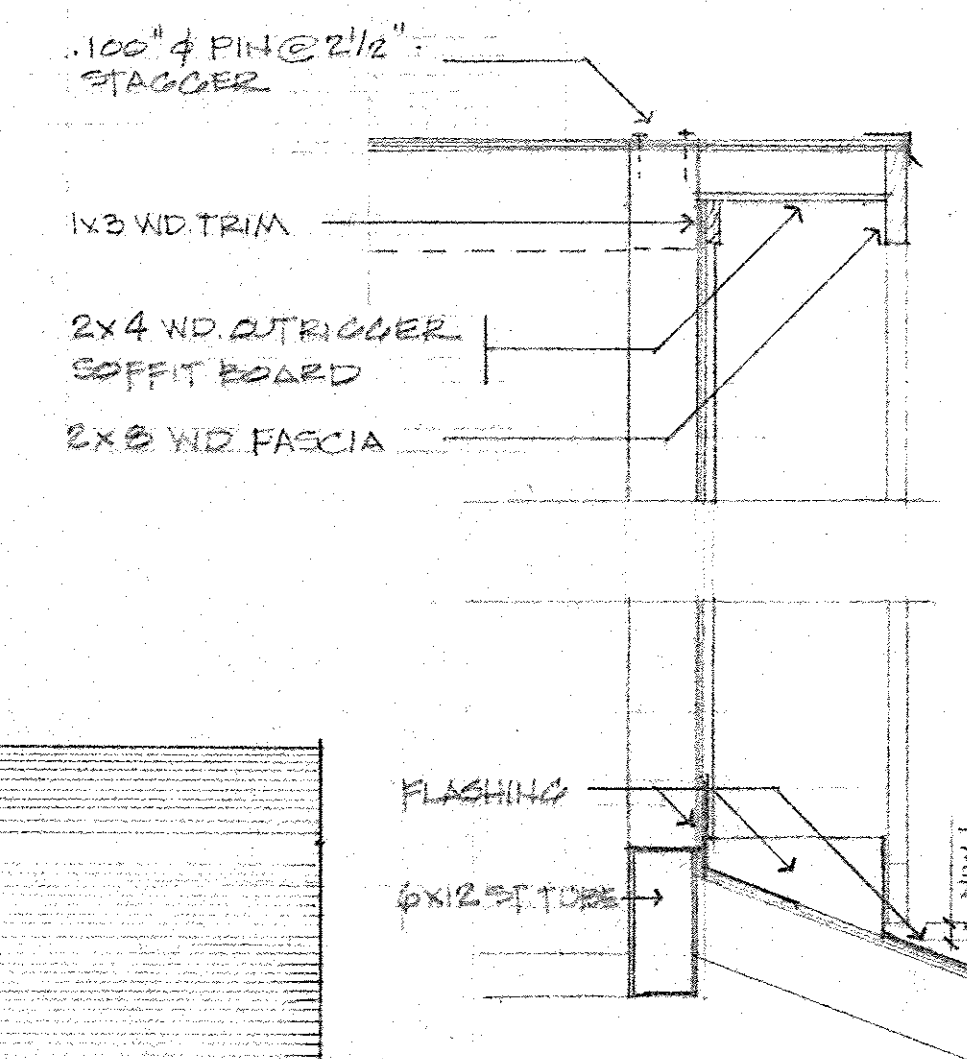
Issue

A-4

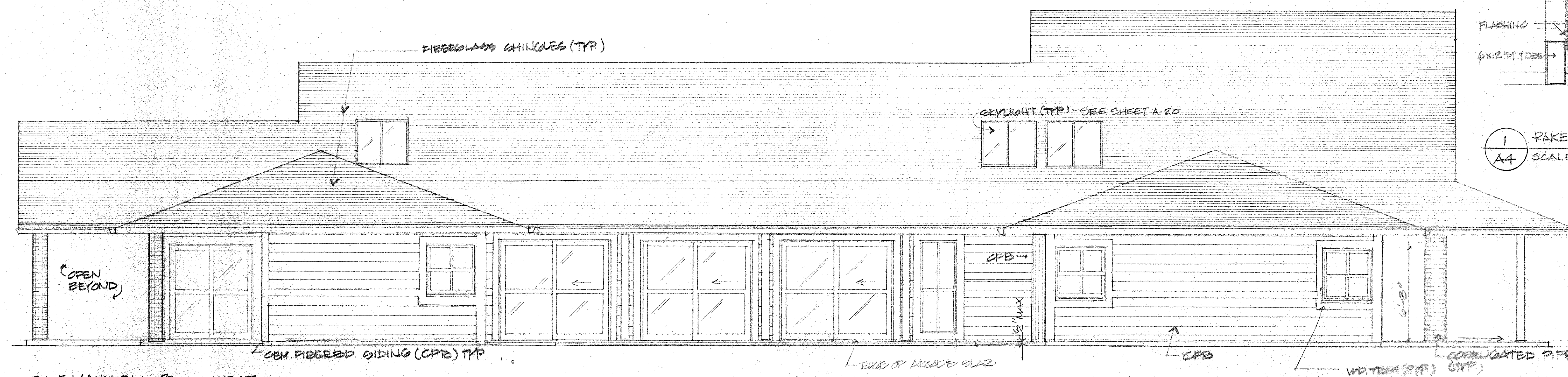
Sheet 5 of 22  
Scale AS NOTED  
Date 11/5/97



ELEVATION A - MAUKA (SOUTH)

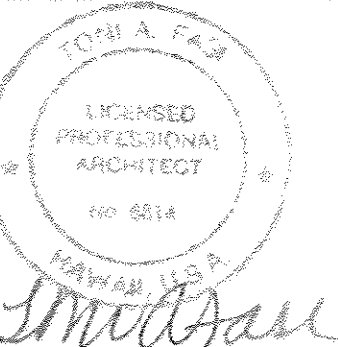
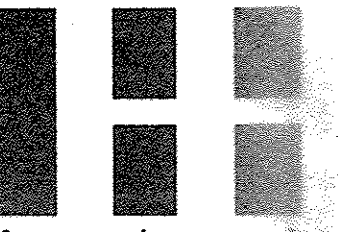


1 RAKE DETAIL  
A4 SCALE:  $\frac{3}{4}'' = 1' - 0''$



ELEVATION B - WEST





This work was prepared by me or under my supervision. Construction of this project will be under my supervision. Permission of this project is as defined in Article 18-62.2 of Title 18, Chapter 62 of the Rules and Regulations of the Board of Registration of Professional Engineers, Architects, Surveyors, and Landscape Architects.

**Waimanalo Teen Project**  
41-467 Hihimanu Street

# 41-40/ Minimum steel

**Waimahalo, Oahu**

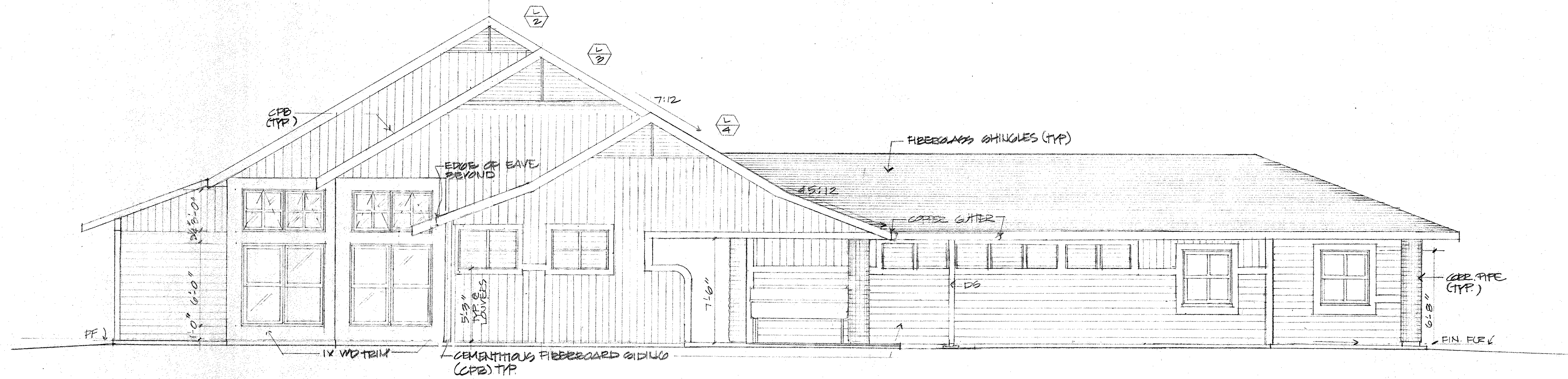
TMK: 4-1-009:001 265

TERIDE  
LEVATIONS -  
EETING FACILITY

[illegible]

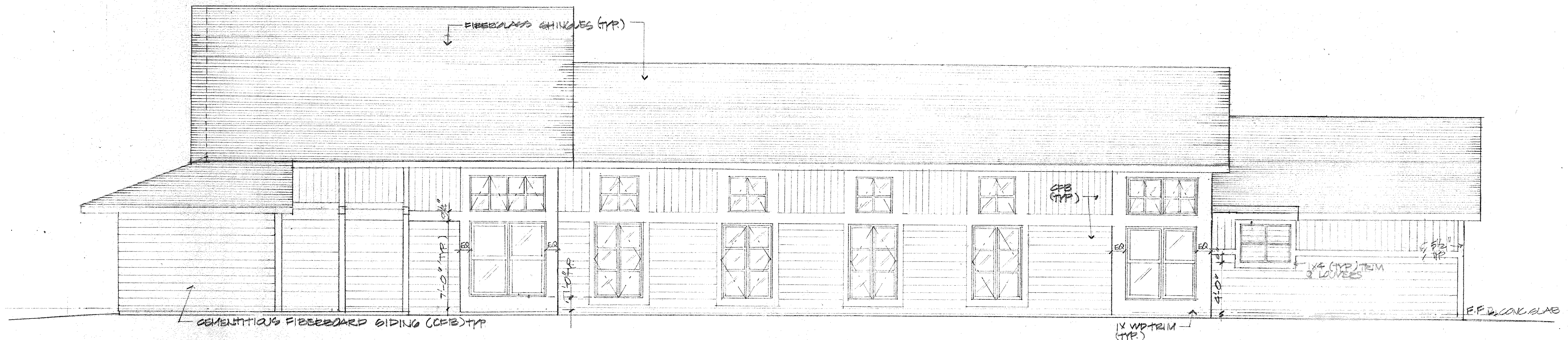
A-5

est 6 of 22  
ale 1/2" = 1'-0"  
te 11/15/97



ELEVATION C - MAKAI (NORTH)

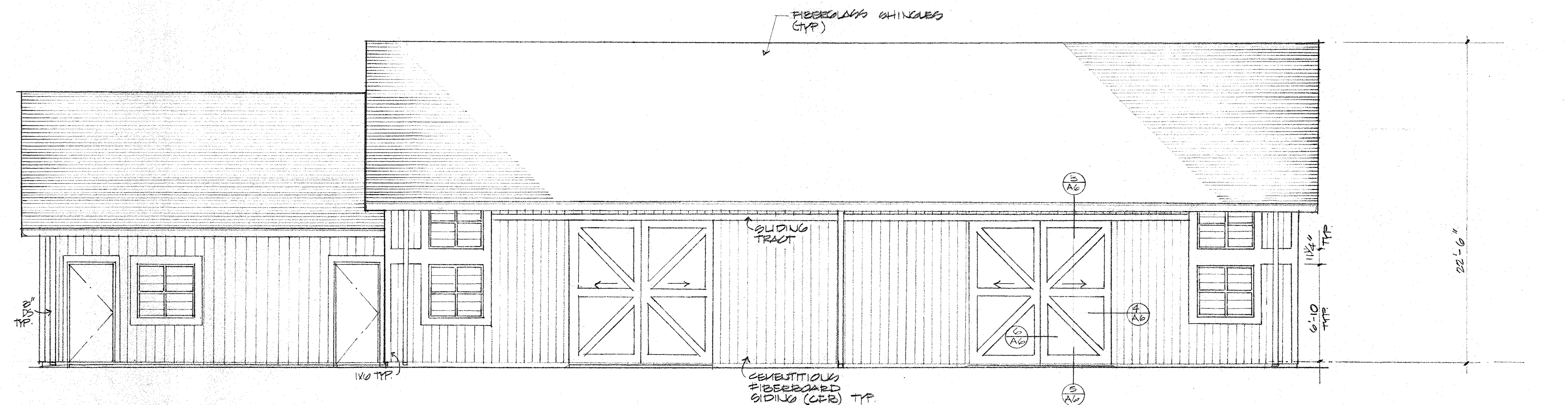
56: 1/4" E 1'-0"



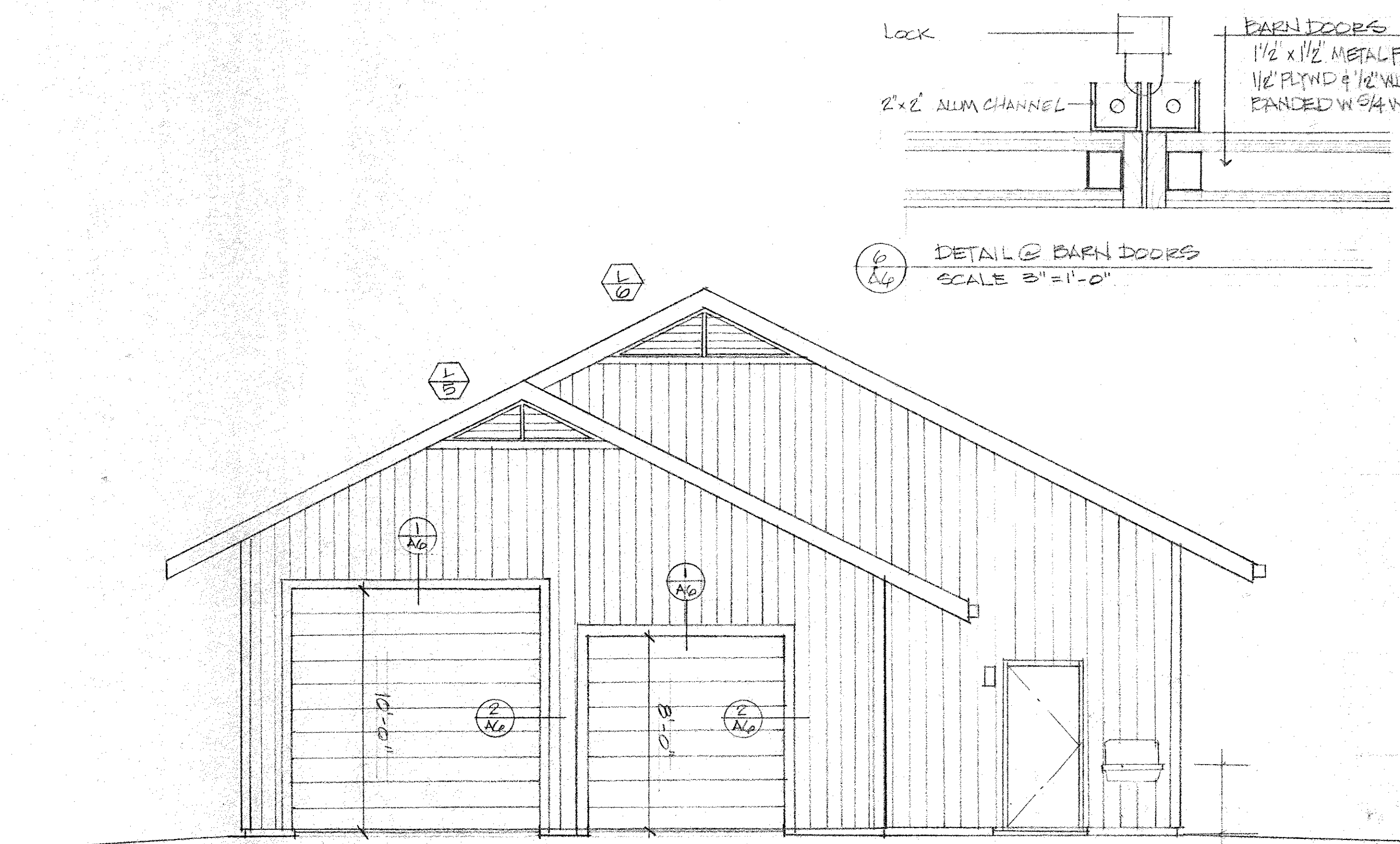
ELEVATION D

$$\text{ex: } \frac{1}{4}'' = 1'-0''$$

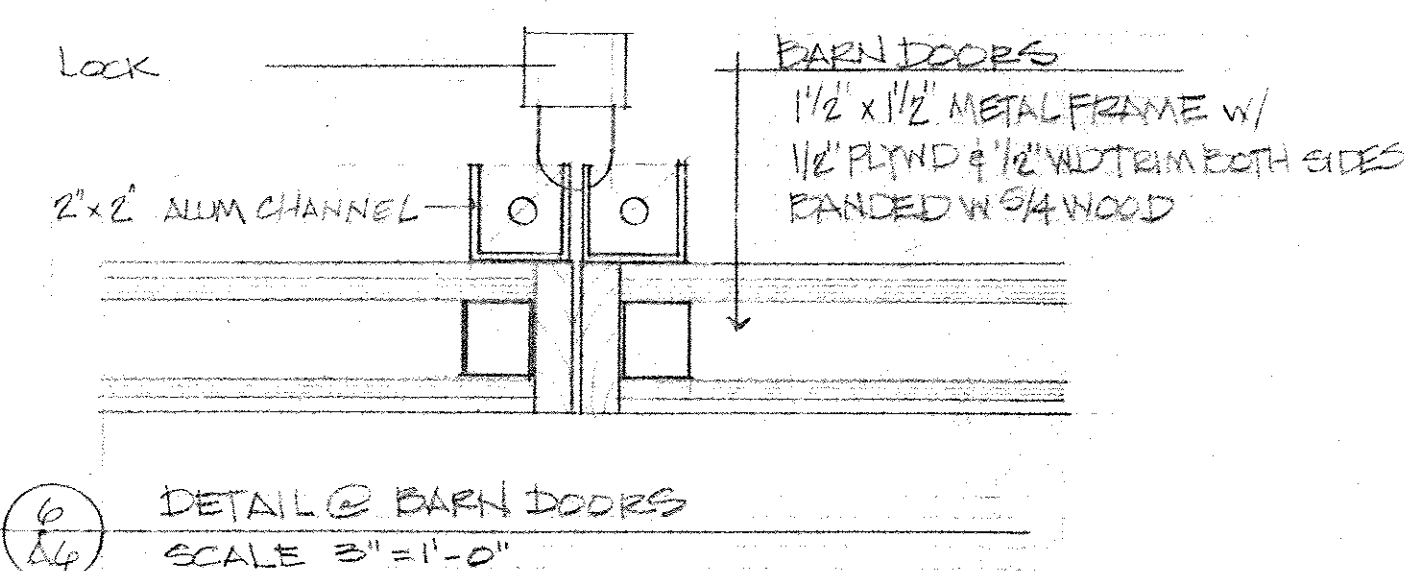




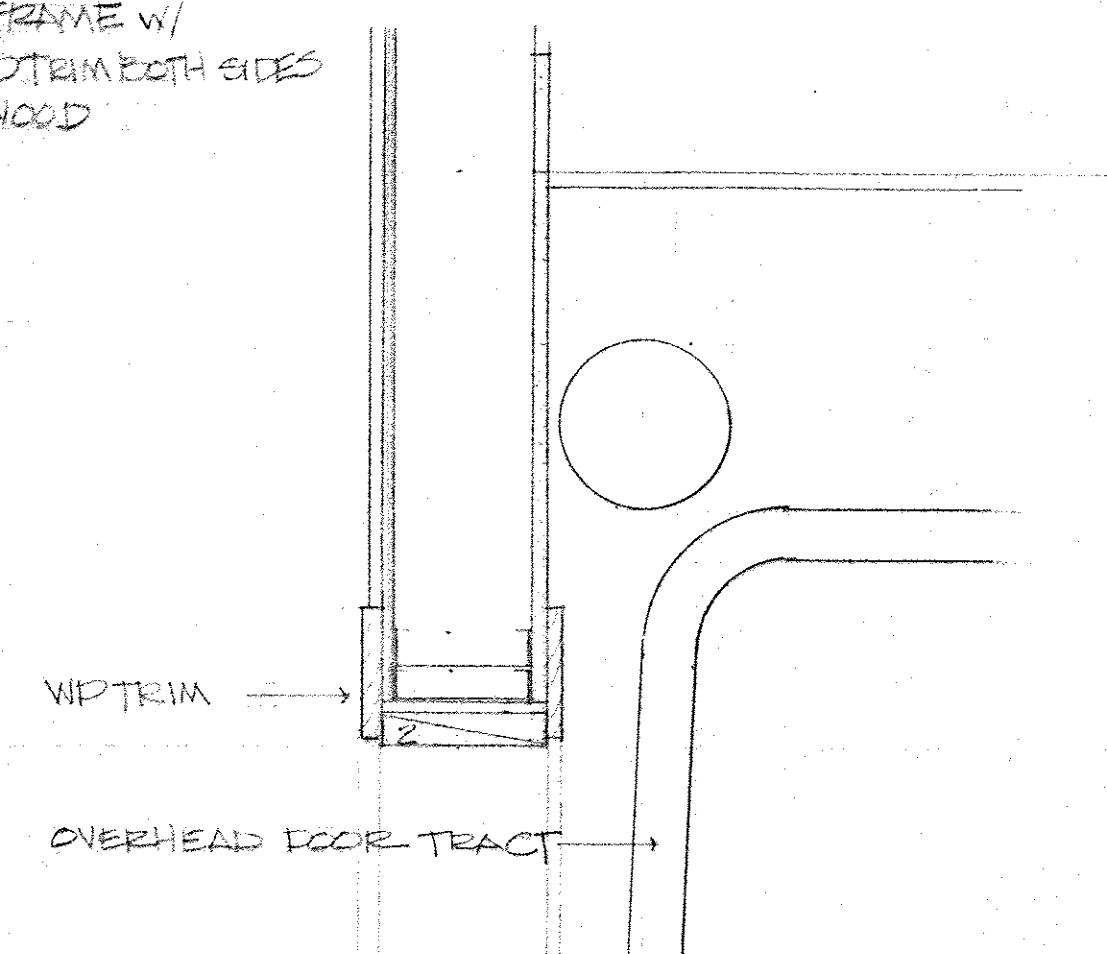
SOUTH ELEVATION - MAUKA  
SC: 1/4" = 1'-0"



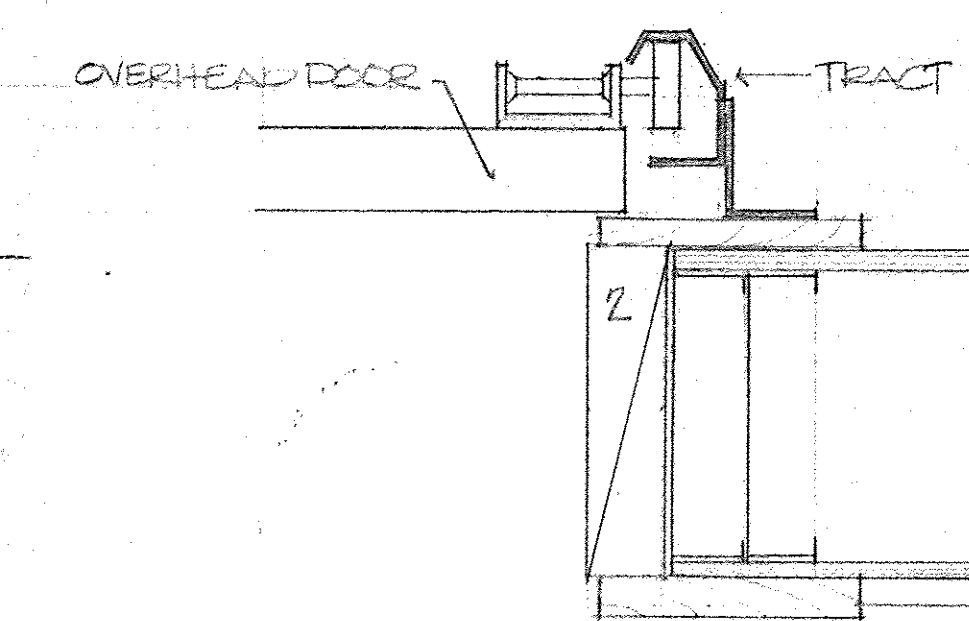
WEST ELEVATION - FARM STORAGE  
SC: 1/4" = 1'-0"



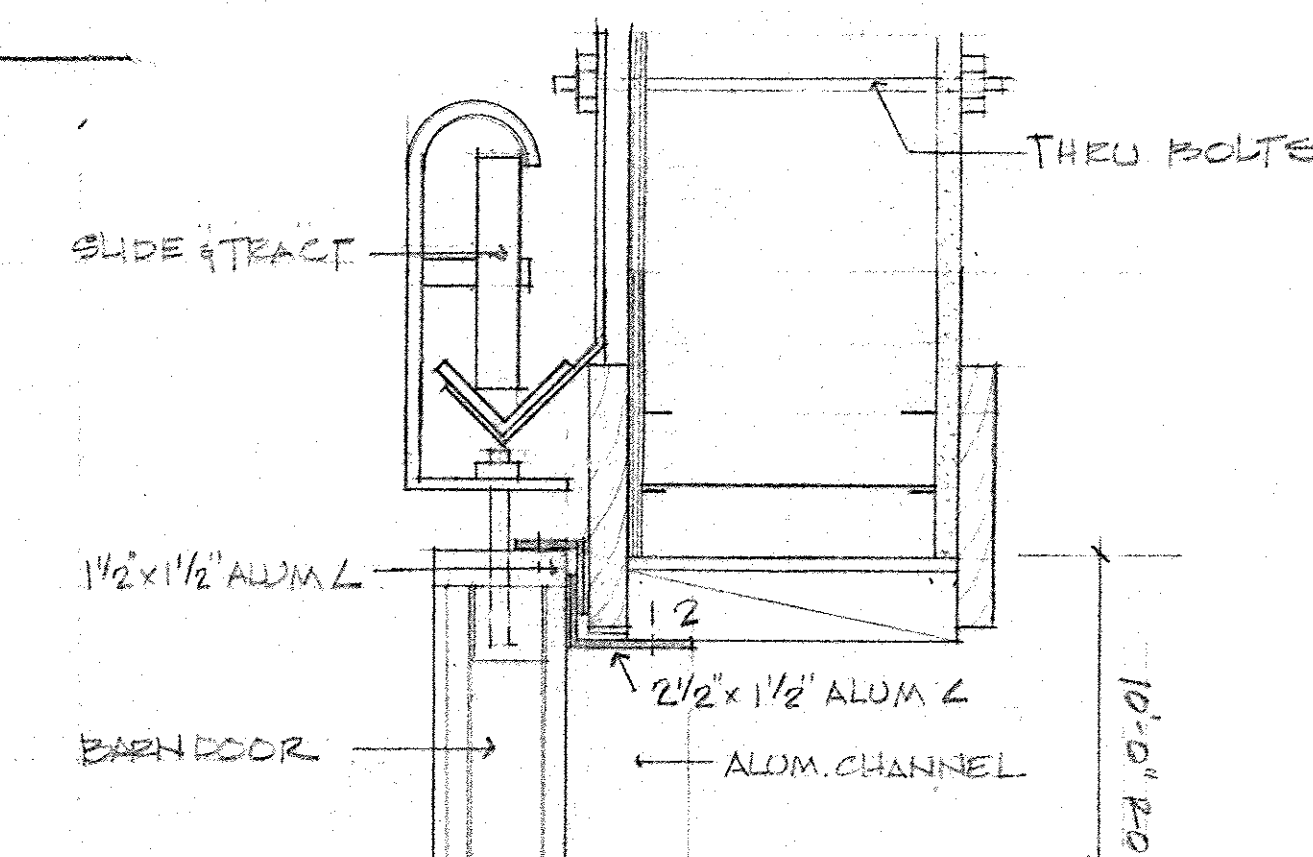
6 AG  
DETAIL @ BARN DOORS  
SCALE 3" = 1'-0"



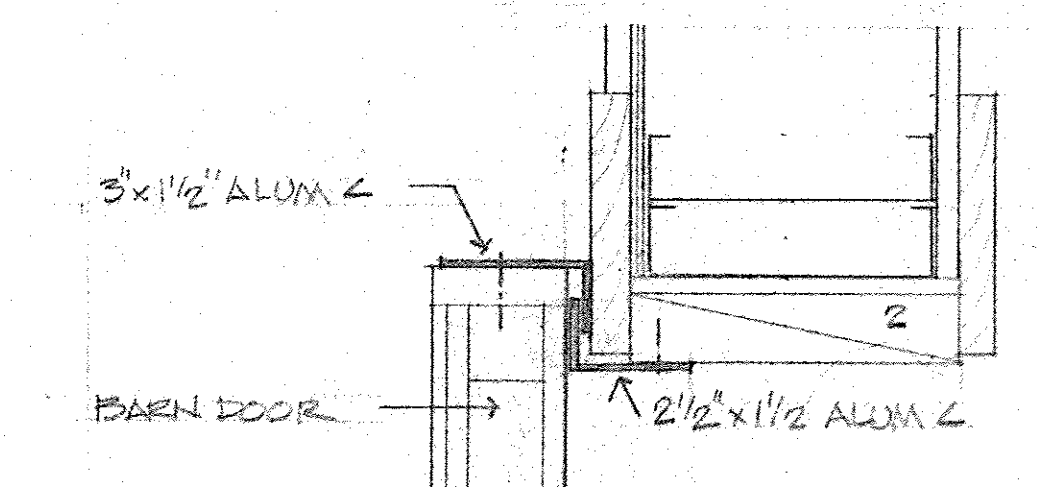
1 AG  
HEAD @ OVERHEAD DOOR  
SCALE 1 1/2" = 1'-0"



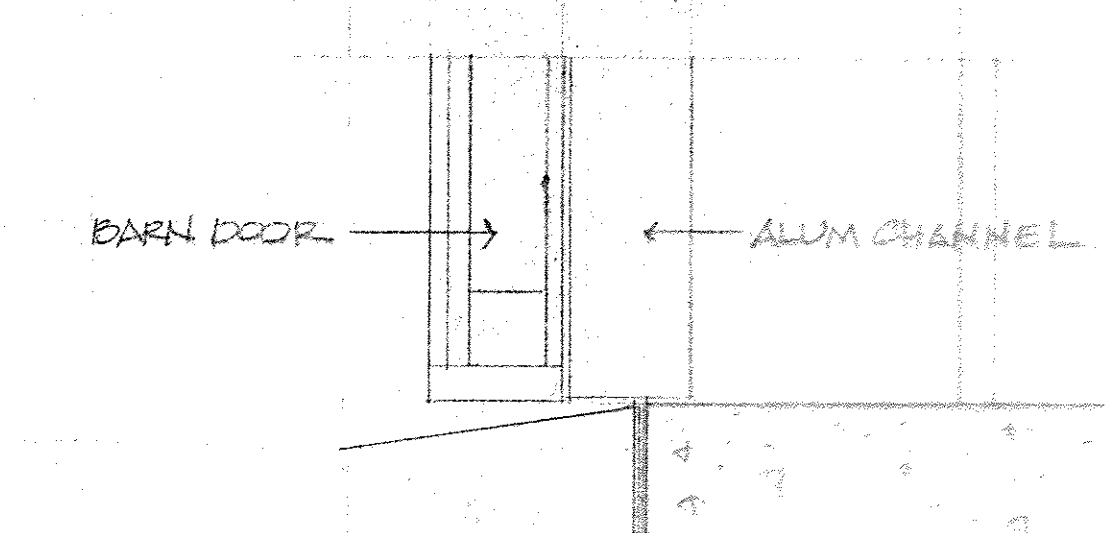
2 AG  
JAMB @ OVERHEAD DOOR  
SCALE 3" = 1'-0"



3 AG  
HEAD @ BARN DOORS  
SCALE 3" = 1'-0"




4 AG  
JAMB @ BARN DOORS  
SCALE 3" = 1'-0"



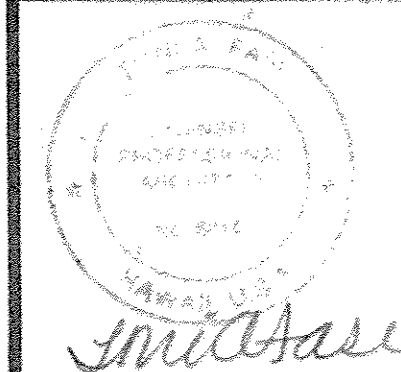
5 AG  
THRESHOLD @ BARN DOORS  
SCALE 3" = 1'-0"

Issue		





3454 Alani Drive  
Honolulu Hawaii 96822  
Phone 808 988-2292



This work was prepared by me or under my supervision. Construction of project was under my supervision. Supervision of this project is as defined in Section 56-82.2 of Title 16, Chapter 80 of the Rules and Regulations of the State Board of Registration of Professional Engineers, Architects, Surveyors, and Landscape Architects.

**Waimanalo Teen Project**  
41 - 467 Hihimanu Street  
Waimanalo, Oahu  
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EXTERIOR ELEVATION  
MAINTENANCE EAF

Issue | |

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Scale AS NOTED  
Date 11/5/97

